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NORTH DAKOTA

State Normal-Industrial School

ELLENDALE, NORTH DAKOTA

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North Dakota
State Normal and Industrial School

Vol. 4 July, 1909 No. 3

Published quarterly by the
STATE NORMAL AND INDUSTRIAL SCHOOL
Ellendale, North Daokta.

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BOARD OF TRUSTEES

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R. McCarten	Cogswell
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FACULTY

W. M. Kern, B. S., Southern Indiana Normal, 1886; A. B., State University of Indiana, 1894; A. M., State University of Indiana, 1909; Instructor in Science, Fairfield College, 1894-5; Superintendent city schools 1895-1905; Institute conductor, 1897-1905; State Normal-Industrial School, 1905-.

President
Education

A. E. Dunphy, Eau Clair, Wis., School of Mechanic Arts; Special Student Wisconsin University, 1907. Teacher of Mechanic Arts. Eau Clair, 1895-8; Waukesha Industrial School 1898-9; State Normal-Industrial School, 1899.

Mechanic Arts

Charlotte Coffin. Graduate Winona Normal, 1894; Pratt Institute, 1902; Critic Teacher, St. Cloud Normal, 1900-1; State Normal-Industrial School, 1902-.

Home Economics

Carolyn Evans. B. L., Carleton College, 1900; Special student, Chicago University, 1903; Instructor in Latin, Whitworth College, 1900-1; Professor of History, Whitworth College, 1901-5. State Normal-Industrial School, 1906-.

Latin

Dominick Ferrara. Graduate Paine's Business College, N. Y., 1900; Ohio Northern University, 1904. Instructor Hanson Military Academy, 1904-5; State Normal-Industrial School, 1905-.

Commercial Arts
Military Science

E. W. Ackert. Graduate Illinois State Normal University, 1899; B. Pd., Steinman College, 1901; A. B., Drake University, 1907. Superintendent of Schools, 1901-7; State Normal-Industrial School, 1907-.

Mathematics

W. G. Bowers. West Virginia State Normal, 1897; A. B., Ohio Wesleyan University, 1905. Assistant, Department of Biology, Ohio, Wesleyan University, 1903-5; Principal of Schools, Leesburg, O., 1905-6; Instructor in Science, Indiana Normal, 1906-7; State Normal-Industrial School, 1907-.

Science

CARRIE TUTTLE. A. B., Wittenberg College, 1896; Student in Library Economy, Chicago University, 1904-6. State Normal-Industrial School, 1907-.
Librarian
Library Methods

HELEN M. BENNETT. Graduate Academic Department Art Institute, 1907; Normal Department Art Institute, 1908; Teacher Olivet House Settlement, Chicago, 1906-7; Assistant Department of Applied Design, Art Institute, 1907-8; State Normal-Industrial School, 1908-.
Drawing
Fine Arts

MARCIA INGALLIS. Graduate New England Conservatory of Music, 1895; Emerson School of Oratory, 1898. Teacher of Voice in Grayson College, 1898-9; Texas Christian University, 1900-02; Hamilton College, 1904-5; State Normal-Industrial School, 1908-.
Girls' Physical Training
Vocal Music

ELSIE MURLEY. Graduate Whitewater Normal, 1901. Teacher in High School, 1901-6; State Normal-Industrial School, 1906-.
Preparatory Department
Critic Teacher

ANNA E. DROTNING. Graduate Downer College 1903; Special Student Wisconsin University, 1906-7; State Normal-Industrial School, 1907-.
Assistant in Home Economics
Preceptress

MYRTLE M. JONES. B. A., University of Minnesota, 1907; State Normal-Industrial School, 1907-.
German
History

MARY B. FLEMINGTON. Graduate State Normal-Industrial School, 1903; A. B., University of North Dakota, 1907; Instructor State Normal-Industrial School, 1905-06; Principal of High School, 1908-09; State Normal-Industrial School, 1909-.
English

**Assistant in Mechanic Arts*

Steam Engines

**To be filled.*

BESSIE L. SWEET. Graduate Maryland Academy, 1899; Student Johnson's Conservatory, 1901-2; Graduate Sherwood's Music School, 1908; Post-graduate Sherwood's Music School, 1909; State Normal-Industrial School 1909-.

Piano

VERNON H. ALGER. Northwestern Conservatory of Music; 1904-5 Pupil of Skovgaard, 1905-'06; Pupil of Danz, 1906-'07.

Conductor N-I Orchestra

Violin

AGNES MCCOLE. Graduate Oshkosh State Normal, 1903.

Grammar Teacher

EDNA JACKSON. Graduate Madison State Normal School, 1902.

Intermediate Teacher

MARY E. JONES. Graduate Winona State Normal, 1906.

Primary Teacher

CHARLES D. STEVENS. Student Y. M. C. A. Institute and Training School.

Physical Director

CALENDAR

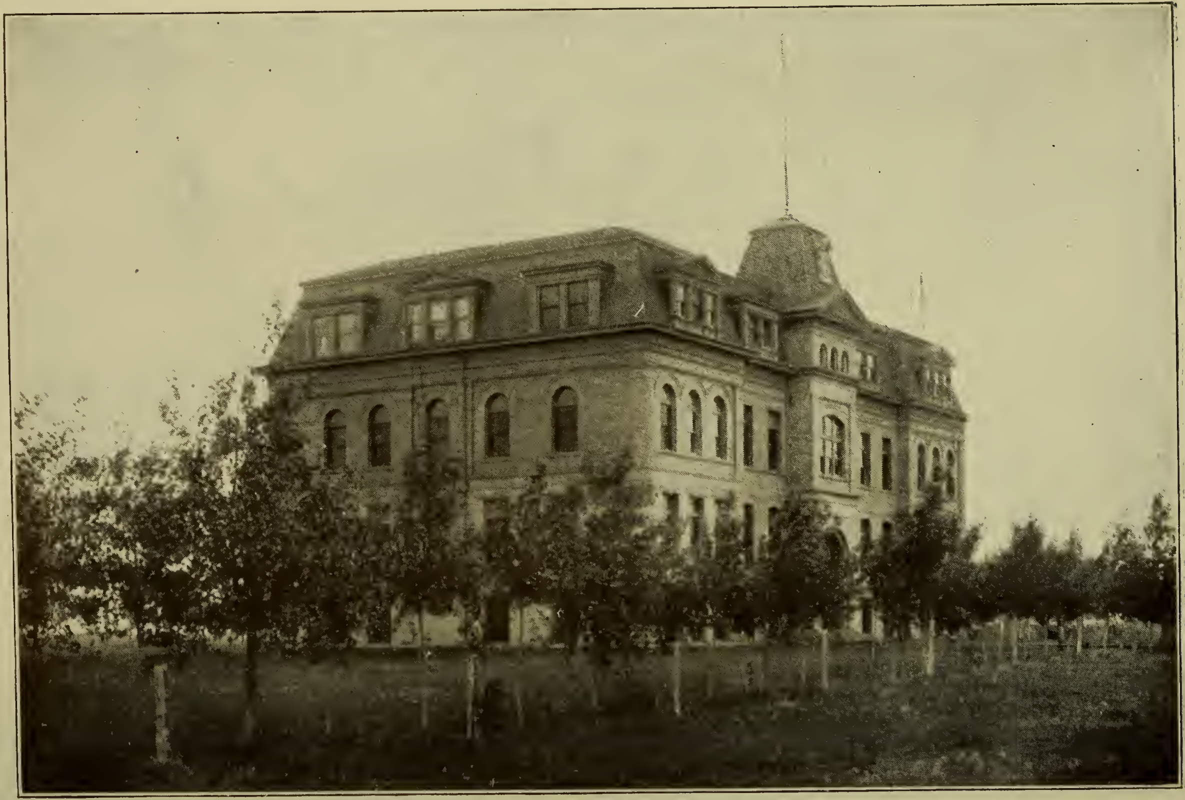
1909

Fall Term of Thirteen Weeks begins,	Monday, September 20.
Entrance Examinations and Registration,	Monday, September 20.
Organization of Classes,	Wednesday, September 22.
Y. W. C. A., Y. M. C. A., and Faculty Reception to Students,	Monday, September 27.
Thanksgiving Holiday,	Thursday, November 25.
Fall Term Ends,	Friday, December 17.

1910

Winter Term of Thirteen Weeks Begins,	Monday, January 3.
Entrance Examination and Registration,	Monday, January 3.
Class Work Begins,	Tuesday, January 4.
Annual Military Contest,	Friday, April 1.
Company A, Reception and Banquet,	Saturday, April 2.
Winter Term Ends,	Saturday, April 2.

Spring Term of Ten Weeks Begins,	Tuesday, April 5.
Easter Vacation,	Friday and Saturday, March 25 and 26.
Memorial Day—Holiday,	Monday, May 30.
Baccalaureate Sermon,	Sunday, June 5.
Annual Oratorical and Declamatory Contest	Monday, June 6.
Field Day,	Tuesday, June 7.
Annual School Concert,	Tuesday, June 7.
Junior-Senior Reception,	Wednesday, June 8.
Commencement, 10:30 A. M.,	Thursday, June 9.
President's Reception,	Thursday evening June 9.
Alumni Reception,	Friday, June 10.



Carnegie Hall

The Normal Department

ONE of the most urgent needs of the state of North Dakota is well educated and trained teachers to serve in the public schools. The thoughtful observer, who has studied public school conditions as they are, is easily persuaded that no other requirement relating to education is of such pressing importance. The act which defines the mission of the State Normal and Industrial School requires it to train teachers "in the science of education and the art of teaching in the public schools with special reference to manual training." In harmony with the spirit of this mandate the standard normal course has been so planned as to afford thorough and systematic training of a three-fold character:

(1) ACADEMIC: The academic courses imply a thorough and comprehensive literary and scientific training. Thorough and accurate scholarship is the teacher's most fundamental equipment.

(2) INDUSTRIAL: Courses in which the student's powers of expression are trained jointly with his receptive faculties.

(3) PROFESSIONAL: Scholarship alone is not sufficient. All right teaching is based upon certain well-defined principles of individual and social development, and upon a clear comprehension of the theories which underlie practice. Opportunity is afforded for applying the principles in practice and for studying the results under sympathetic and competent supervision.

NORMAL COURSES

The State Normal-Industrial School desires to render every possible service to the educational interests of the state. This department aims to fit young men and young women for the profession of teaching. Four normal courses are offered and the student is permitted to elect the one he shall pursue. In three of these courses, the English-Manual Training, the Latin and the Supervisors' Course, the academic and professional features are practically identical. Each leads to the diploma of the Normal Department which entitles the graduate to a State Certificate of the second class, valid for three years, and a Life Certificate after three years of successful teaching. The fourth course, embracing a single year's work, is designed to afford students who are unable to spend more than a single year in school opportunity for thorough reviews and a minor degree of professional training.

English-Manual Training Course

	IX	X	XI	XII
English	Reading Grammar	Literature	Literature	
History	U. S. History Civics	Gen. History		Hist. of Ed. Philos. of Ed.
Math.	Arithmetic	Algebra	Algebra Geometry	Geometry
Science	Geography	Biology	Physics	Chemistry
Education	Pedagogy		Psychology	Prac & Meth.
Man. Train.	Vocal Music	Drawing	Manual Train	Manual Train

Physical Training and Rhetoricals throughout the course.

The English-Manual Training Course embraces the following lines of work.

1. **English.**

The study of Language is continued throughout three years.

(*a*) READING: Emphasis is laid upon thought getting; expression and the acquisition of skill. Course I.

(*b*) GRAMMAR: The principles of English Grammar. Course II.

(*c*) LITERATURE I: Composition, Rhetoric and the study of Masterpieces. Course III.

(*d*) LITERATURE II: The critical study of the masters and a definite amount of reading. Course IV.

2. **History and Civics.**

(*a*) AMERICAN HISTORY: An academic study and review designed to familiarize students with the sequence of American History. Course VII.

(*b*) CIVICS: Colonial, Revolutionary and Federal Government. Course VIII.

(*c*) ANCIENT HISTORY: The essentials of history from the earliest civilization in Egypt and Mesopotamia to the establishment of the western empire by Charles the Great. Course IX.

(*d*) MODERN HISTORY: Mediaeval and Modern European History down to the present day. Course X.

3. **Mathematics.**

(*a*) ARITHMETIC: A thorough and comprehensive review of processes together with instruction in the best methods of presentation. Course XI.

(*b*) ALGEBRA: Elementary Algebra to quadratic equations. Course XIV.

(*c*) ALGEBRA AND PLANE GEOMETRY: Advanced Algebra through quadratics, ratio, proportion and progressions, together with Plane Geometry. Course XV.

(*d*) PLANE AND SOLID GEOMETRY: Course XVI.

4. **Science.**

(*a*) GEOGRAPHY: A comprehensive and critical study of descriptive geography. Course XVIII.

(*b*) PHYSICAL GEOGRAPHY: Physical ages of the earth; underlying causes; effect upon mankind, etc. Course XIX.

(*c*) ZOOLOGY: Lectures, recitations and laboratory work. Course XX

(*d*) BOTANY: Study of types, their life history, relation to surroundings, etc. Course XXI.

(*e*) PHYSICS: A full and comprehensive treatment of the subject by means of lectures, recitations and laboratory work. Course XXIII.

(*f*) CHEMISTRY: The laws, theories, formulae and fundamental principles developed in the recitation and laboratory. Courses XXIV, XXV.

5. **Education.**

(*a*) PEDAGOGY: The principles and methods of teaching and general school management. Course XXVIII.

(*b*) PSYCHOLOGY: The processes by which knowledge is acquired and elaborated. Course XXIX.

(*c*) HISTORY OF EDUCATION: The educational systems of ancient and modern peoples together with a study of the lives and practices of the educational reformers. Course XXX.

(*d*) PHILOSOPHY OF EDUCATION: The nature and meaning of education and the being to be educated. Course XXXI.

(*e*) OBSERVATION AND PRACTICE: Actual experience under conditions similar to those the student must meet after graduation. Course XXXIII.

6. **Manual Training.**

(*a*) VOCAL MUSIC: Tune, time, technique, etc. The principles of music as applied in instruction in the grades of the public schools. Musical appreciation. Course LXXXVI.

(*b*) DRAWING: Taught, not as an end, but as a means; a mode of expression. Course LXIII.

(*c*) MANUAL TRAINING: A course in handwork for primary, intermediate and grammar grades, extending over two years and including Paper Cutting, Clay Modeling, Pottery, Paper and Cardboard Construction, Basketry, Weaving, Rope and Cordwork and Woodwork. Course XL.

Latin Course

	IX	X	XI	XII
English	Reading Grammar	Literature	Literature	
History	U. S. History Civics	Gen. History		Hist. of Ed. Philos. of Ed.
Math.	Arithmetic	Algebra	Algebra Geometry	Geometry
Science	Geography	Biology	Physics	Chemistry
Education	Pedagogy		Psychology	Prac & Meth.
General	Vocal Music Drawing	Latin I	Latin II	Latin III

Physical Training and Rhetoricals throughout the course.

In the Latin Course the English, History, Mathematics, Science and Education schedules are identical with those of the English-Manual Training Course. Its special features lie chiefly in the substitution of Latin for Manual Training as indicated herewith. In lieu of the regular teachers' course in Manual Training the student pursues the following subjects:

1. **Vocal Music.**
   Theory of music, sight singing, the study of songs especially adapted for use in the grades of the public schools. Course LXXXVI.
2. **Drawing.**
   Designed to cover all manual expression properly coming under the head of drawing in the public schools. Course LXIII.
3. **Latin I.**
   The elements; the mastery of inflections and syntax. Course XXXIV.
4. **Latin II.**
   Caesar's Gallic War, four books, and a critical study of the syntax of the language. Course XXXV.
5. **Latin III.**
   Cicero, his life, times, and chief orations. Course XXXVI.

Supervisors Course

	IX	X	XI	XII
English	Reading Grammar	Literature	Literature	
History	U. S. History Civics	Gen. History		Hist. of Ed. Philos. of Ed.
Math.	Arithmetic	Algebra	Algebra Geometry	Geometry
Science	Geography	Biology	Physics	Chemistry
Education	Pedagogy		Psychology	Prac & Meth.
Special	Drawing	Drawing	Vocal Music	Vocal Music

Physical training and rhetoricals throughout the course.

In its general features the Course for Supervisors is identical with the English-Manual Training and Latin Courses. Its special features are Music and Drawing. This course is especially designed to prepare young men and women to take positions as teachers and supervisors of Music and Drawing. The demand for such teachers was never so great as at the present time. In addition to the regular academic courses the following special courses are prescribed.

1. **Vocal Music I.**

The elements with ample opportunity for practice; sight reading; ear training; musical dictation; writing of intervals, scales, chords, etc. Course LXXXVII.

2. **Vocal Music II.**

Public school music; time, tune, technique, the aesthetics; the practical application of methods in practice teaching. Course LXXXVI.

3. **Drawing 1.**

The laws of simple perspective as shown in cube, sphere, etc.; sketching from nature and composition from landscape drawing; applied design; the pencil and chalk in representing and decorating. Course LXIII.

4. **Drawing II.**

Advanced drawing from cast and from nature; illustrative and pictorial drawings; the hues, range, density, etc., of the commoner pigments; methods of presentation in the grades. Courses LXIV, LXVI.

Elementary Course—One Year

	Fall Term	**Winter Term**	**Spring Term**
English	Reading	Grammar	Grammar
History	U. S. History	U. S. History	Civics
Mathematics, etc.	Arithmetic	Arithmetic	Pedagogy
Science	Geography	Geography	Physiography
General	Music	Music-Drawing	Drawing

Physical Training and Rhetoricals throughout the Course. Beginning classes are organized in the common branches at th times indicated by the above program. Students who are properly prepared to enter upon this course may thus teach a part of the year and resume their school studies with a minimum loss of time and delay.

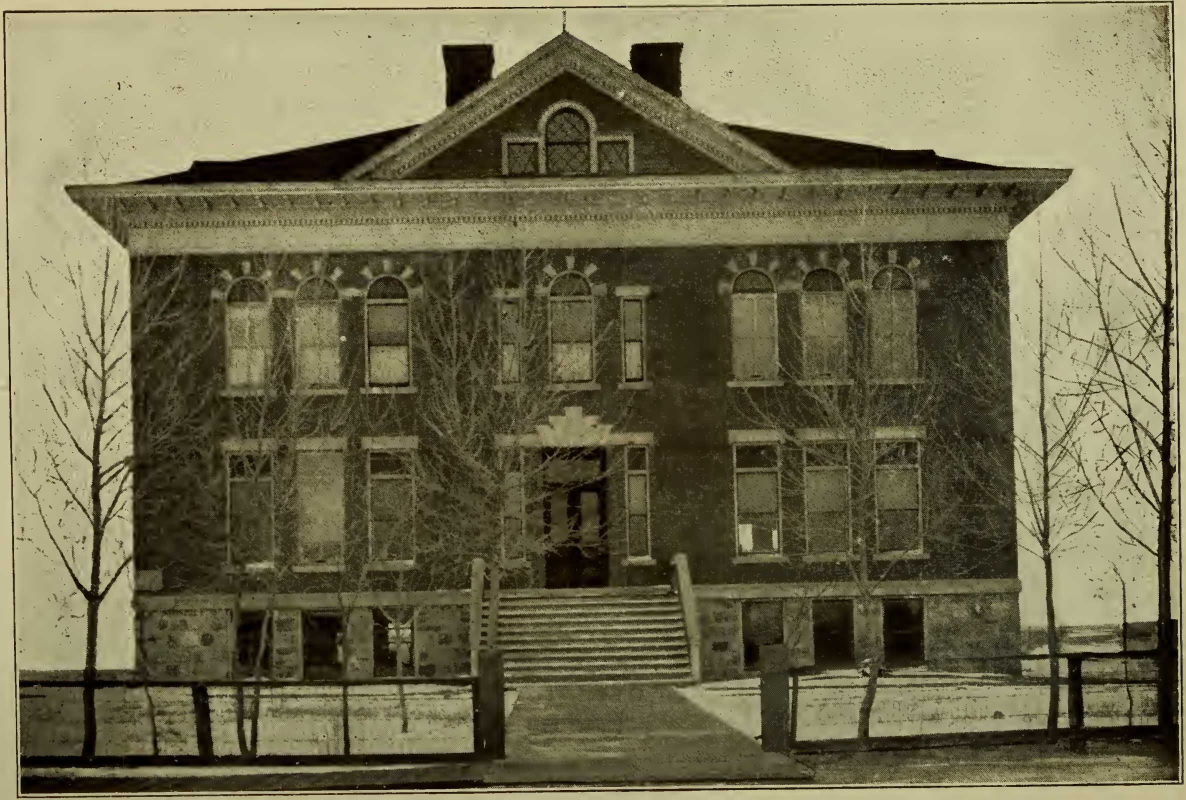
HIGH SCHOOL GRADUATES

Graduates of first-class high schools or those who have completed an equivalent course will be graduated after one year of successful work. Such persons will be required to complete the following subjects:

Psychology	3 terms
History and Philosophy of Education	3 terms
School Management	1 term
Practice, Methods and Reviews	5 terms
Manual Training *or* Domestic Science and Art	3 terms
Total	15 terms

Teachers of Manual Training Domestic Science and Art

The demand for teachers of Manual Training and Domestic Science and Art greatly exceeds the supply and as a result the wages paid is much in advance of that offered in other lines. In almost every other line of teaching the supply exceeds the demand. No other school in the northwest is better equipped to train teachers in these special subjects. No other school in North Dakota is so well equipped to train teachers in these special subjects. The faculty offers every proper aid to graduates to secure positions.



Manual Training Building

The Industrial Department

It is the design of this department to offer strong academic courses in English, Mathematics, Science and History and to give training in such Industrial Arts as may serve to prepare young men and young women to do their share of the world's work. No young man or young woman who is lacking in general intelligence can be expected to win for manual labor any great degree of public esteem. For this reason, no pupil will be permitted to pursue industrial courses alone, but a proper balance will be maintained between so-called intellectual and manual subjects. Special students, however, who present satisfactory evidence of adequate preparation may, upon the recommendation of the enrolling committee, register for such industrial courses as they may elect. Students who complete an industrial course will be entitled to the diploma as a certificate of proficiency, but it is proposed to make such certificate truly represent the attainments of those who receive them.

The following industrial courses are offered. In each of these courses thorough and systematic instruction is prescribed in English, Mathematics, History and Science.

INDUSTRIAL COURSES

I. Steam Engineering Course.

Designed to fit young men for positions as steam engineers, firemen and steam fitters. Students who plan to enter higher technical schools register for German I and II.

(1) CARPENTRY AND TURNERY: Common hand tools; the mastery of the lathe; application of principles. Courses XLI, XLIII.

(2) PATTERN MAKING AND MOLDING: The making of patterns; foundry practice. Courses XLVI, XLVII.

(3) FORGING AND TOOL MAKING: Drawing out; bending; welding; the making of various useful tools. Course XLIV.

(4) MACHINE SHOP PRACTICE: Plane, taper and template turning, etc. Course XLIX.

(5) MECHANICALR DAWING: Extending through the entire course and intimately related to each line of mechanical work. Courses L, LI, LII, LIII.

(6) STEAM ENGINES:

(*a*) TRACTION ENGINES: Gasoline and traction engines. Course LXXII.

(*b*) STEAM ENGINES: Thermo-dynamics; indicator; governors; types, etc. Course LXXIII.

(*c*) LABORATORY I: Engine practice; injectors; pumps, etc. Course LXXIV.

(*d*) LABORATORY II: Efficiency tests; planimeter; calibration, etc. Course LXXV.

(*e*) MATERIALS AND VALVE GEARS: Courses LXXVII, LXXVIII.

(*f*) STEAM HEATING: Heating surface; grate surface and steam space, etc. Course LXXVI.

II. Mechanic Arts Course.

Designed to afford a thorough training in Mechanical Drawing and in the use and application of tools; to prepare young men to enter upon higher technical courses; and to train teachers of Mechanic Arts, and Directors and Supervisors of Manual Training.

(1) JOINERY AND TURNERY: Care and use of the common tools and the mastery of the lathe. Course XLI, XLII, XLIII.

(2) FORGING: Drawing out; bending; welding; making of useful articles. Course XLIV.

(3) PATTERN MAKING AND MOLDING: The making of patterns; foundry practice. Courses XLVI, XLVII.

(4) CHIPPING AND FILING: For the purpose of developing skill in the use of the file and cold chisel. Course XLVIII.

(5) MACHINE SNOP PRACTICE: Tool making; tool work; tool and screw work. Course XLIX.

(6) DRAWING: Freehand; mechanical. Courses L, LI, LII, LIII.

III. Home Economics Course.

Designed to train young women to administer intelligently and wisely the affairs of a home; to afford thorough instruction in the principles that underlie artistic dressmaking; to train for positions as teachers, dressmakers, matrons, house-keepers and seamstresses.

(1) HAND SEWING: Materials; stitches; measurements; draughting and making. Course LIV.

(2) MACHINE SEWING: Care and use of machine and machine sewing. Course LV.

(3) DRESSMAKING: Measuring; drafting, cutting, fitting and making. Course LVI.

(4) DESIGN: Use of pencil and water color; study of bows gowns and drapery; the humna form; designing gowns for home and street. Course LXV.

(5) ELEMBNTARY COOKERY: Classification of foods; principles of cooking; application. Course LVIII.

(6) ADVANCED COOKERY: Composition, value and cost. Course LIX.

(7) INVALID COOKERY AND HOME NURSING: The sick room; patient; the most modern treatment of these themes. Course LXII.

(8) SERVING: Furnishing, laying and serving. Course LX.

(9) MARKETING: Marketing and preparing meals.

(10) CHEMISTRY: General and analytic chemistry. Courses XXIV, XXV.

(11) FOOD ANALYSIS: The chemistry of foods. Course XXVI.

(12) BACTERIOLOGY: Prniciples, their significance and application to life. Course XXVII.

IV. Commercial Course.

Designed to fit young men and young women for positions of responsibility and trust in the business world, such as bookkeepers, office clerks, amanuenses, typewriters, reporters and teachers of commercial subjects.

(1) SPELLING: A half-year course in both oral and written commercial spelling including a careful drill in pronunciation, marking and defining. Course LXXX.

(2) PENMANSHIP: A half-year course in rapid legible writing. Course LXXX.

(3) COMMERCIAL ARITHMETIC: Numerous problems such as will confront the student in the business affairs of life. Course LXXXII.

(4) BOOKKEEPING: Single and double entry through various forms of business. Course LXXIX.

(5) SHORTHAND: Sounds, signs, phrases and speed drills. The improved Munson system. Course LXXXIV.

(6) TYPEWRITING: The "touch" system. Course LXXXV.

(7) COMMERCIAL LAW: A half-year course dealing with the various forms of commercial paper and the rights of the individual under the law. Course LXXXIII.

V. Library Course.

Designed to train young men and young women to take positions as librarians.

(1) TYPEWRITING: Training for clerical efficiency. Course LXXXV.

(2) DRAWING: Freehand, with special reference to preparing bulletins, charts, placards, etc. Course LXIII.

(3) ENGLISH: Preliminary to technical training, and for general culture. Courses I, II, III, IV, V.

(4) GERMAN: To acquire facility in reading the language. Courses XXXVIII, XXXIX.

(5) LIBRARY METHODS I: Library hand writing; cataloging; reference works; classification; periodicals; loan systems; practice. Course LXIX.

(6) LIBRARY METHODS II: Indexing; ordering; accessioning; binding and mending; supplies and statistics; administration; practice. Course LXX.

VI. Fine Arts Course.

Designed to afford a culture course in fine arts; to train students to fill positions as teachers and supervisors of Drawing and Art Instruction; and to afford instruction in the principles of design and their application.

(1) FREEHAND DRAWING: Drawing in pencil and charcoal from ornament, still life and flowers. Course LXIII.

(2) APPLIED DESIGN: Application of design to objects. Course LXV.

(3) HISTORIC ORNAMENT: Historic styles and drawings of the typical features of each. Continuation of Course LXIII.

(4) COMPOSITION: Space relations, proportion, color harmony, etc.

(5) CHINA PAINTING AND KILN BURNING: Courses LXVII and LXVIII.

(6) MATERIALS: Pencil, charcoal, crayons, water colors, oil.

VII. Music Course.

Designed to afford opportunity for culture as a fine art and to train teachers.

(1) HAND CULTURE.
(2) SIGHT READING.
(3) MAJOR AND MINOR SCALES.
(4) PHRASING.
(5) GRADED STUDIES AND STUDIES FROM MASTERPIECES.
(6) HARMONY.
(7) MUSICAL HISTORY.
(8) COURSES XC, XCI, XCII, XCIII.

VIII. Short Course in Dressmaking.

A three-months' winter course designed to meet the needs of girls who desire to become proficient in the elements of dressmaking and whose time and means are limited. This course embraces the following subjects:

(1) ARITHMETIC: A practical course in the elements; factoring; fractions; denominate numbers; household accounts, etc. Course XIII.

(2) HOME ECONOMICS: The management of the home. A clear, practical and concise study of the necessities of daily home life. Course LXI.

(3) DRESSMAKING: Measuring and Drafting; the Machine; Materials; Shirt Waists; Skirt; Fastenings; Children's Garments; Underwear; Color and Form in Dress, etc. Course LVII.

IX. Short Course in Farm Engineering.

A three-months' winter course planned to meet the most practical requirements of young men on the farm. The course includes the following lines of work:

(1) ARITHMETIC: The elements; factoring; fractions; denominate numbers; measurements of walls, tanks, bins, lands, etc., accounts with farm crops; problems relating to the farm, as cost of fences, buildings, silos, rations, etc.; commercial paper, etc. Course XIII.

(2) AGRICULTURE: Soil and Soil Water; Plant, Plant Food and Growth; Rotation of Crops; Germination; Seed Testing; Transplanting; etc. Course XMII.

(3) STEAM ENGINES AND FARM MECHANICS:

(*a*) SHOP WORK:

(1) *Carpentry:* Tools; the Joints and Splices, etc., necessary in Farm Construction; Working Drawings and Construction in Miniature, etc. Course XLII.

(2) *Blacksmithing:* Pupils make from stock tongs, hammer, chisels, rings, links, chains, clevises, arrow teeth, etc. Course XLV.

(3) *Soldering and Brazing:* Repairs.

(*b*) ENGINES: A study of steam engines, boilers, gas engines, power transmission, lubricants, etc., and stationary and traction engine practice. Course LXXI.

OUTLINE OF INDUSTRIAL COURSES

FIRST YEAR

Grammar
U. S. History
Arithmetic
Civics
Geography
(a) Spelling
(b) (c) (j) Carpentry
(b) (c) Joinery
(d) (i) Sewing
(a) (e) (f) Bookkeepin I
(g) Drawing
(h) Instrumental Music
(i) Home Economics
(j) Agriculture
(j) Steam Engines
(j) Blacksmithing
(j) Soldering and Brazing
(k) Latin I

SECOND YEAR

Literature
General History
Algebra
Zoology
Botany
(a) Commercial Arithmetic
(a) Bookkeeping II
(b) (c) Pattern Making
(b) (c) Molding
(d) Sewing
(e) (f) Drawing
(g) Fine Arts
(h) Instrumental Music
(k) Latin II

JUNIOR

Literature
Algebra
Geometry
Physics
(a) Shorthand
(a) (e) (f) Typewriting
(b) Tool Making
(b) Engines I
(c) Forging
(d) Chemistry I
(d) Cookery
(d) Serving
(e) Library Methods
(g) Fine Arts
(h) Instrumental Music
(k) German I
(k) Latin III

SENIOR

Geometry
Chemistry
(a) Commercial Law
(b) Engines II
(b) (c) Machine Shop Pracitce
(d) Chemistry II
(d) Food Analysis
(d) Bacteriology
(d) Cookery
(d) Invalid Cookery and Home Nursing
(e) Library Methods
(g) Fine Arts
(h) Instrumental Music
(k) German II
(k) Trigonometry
(k) Latin IV
(k) Literature III
(k) Literature IV

(a) Course in Commercial Arts
(b) Course in Steam Engineering
(c) Course in Mechanic Arts
(d) Course in Home Economics
(e) Course in Library Economy
(g) Course in Fine Arts
(h) Course in Instrumental Music
(i) Course in Dressmaking
(j) Course in Farm Engineering
(k) Elective

SUMMARY OF INDUSTRIAL COURSES

	IX	X	XI	XII
Engish	Grammar	Literature	Literature	*Elective*
History	U. S. History Civics	General History	*Elective*	*Elective*
Mathematics	Arithmetic	Algebra	Algebra Geometry	Geometry
Science, etc.	Geography	Biology	Physics	Chemistry
Physical Training	Physical Training throughout the course.			
Industries	*Mechanic Arts* *Home Economics* *Steam Engineering* *Library Economy* *Fine Arts* *Music* *Farm Engineering* *Dressmaking*			

The above academic subjects are standards for all Industrial courses. For advanced elective and required subjects consult the "Outline of Industrial Courses." All academic subjects require five periods per week; industries ten periods per week. Each course extends over four years. *Subjects prtnted in italics are electives.*

Courses of Instruction

ENGLISH

THE chief aims of the work in English are as follows: It seeks, in harmony with the practical character of the education offered at this school, to make the work as practical and useful as possible by enabling the pupil to express his thoughts in clear, fluent and elegant English, because of the recognized fact that an educated person, be his education ever so thorough, is of little real value in a community, if he can not give expression to his ideas and knowledge.

It seeks to make the pupil thoroughly acquainted with some carefully selected masterpieces of literary prose and poetry, such as illustrate the various forms of composition. It also seeks to awaken in the pupil an appreciation of the best in literature, to enable him to enjoy it, and to give him some knowledge of literary criticism, such as will help him to read intelligently and guide him in his future reading.

It seeks to give the pupil some knowledge of the literary history of England and America, and to introduce him, first, to the great periods and movements in the history of literature and to the relation that history bears to literature; then to the lives, characters and works of the noble men and women of literature.

Course I. Reading.

A careful drill in the correct interpretation and expression of written thought. The purpose is to lead the pupil to an intelligent, forceful and pleasing interpretation of the written page. The instruction is based upon the principle that right impression must precede true expression.

Course II. Grammar.

Elementary. A thorough study of theoretical and applied grammar with constant written and oral exercises and drills in the use of correct forms of speech with special attention to common errors. Elementary composition.

Course III. Literature I.

(*a*) Composition and Rhetoric based on Lockwood and Emerson.

Letter writing, Description and Narration. Special emphasis put upon vocabulary, punctuation, capitalization, paragraph structure and figures of speech.

(*b*) Masterpieces. For study: Burroughs' "Sharp Eyes"; Dickens' "Christmas Carol"; Goldmsith's "Deserted Village"; Gray's "Elegy"; Hawthorne's "The Great Stone Face," "My Visit to Niagara," "The Ambitious Guest," "Old Ticonderoga," "The Great Carbuncle"; Lowell's "Vision of Sir Launfal," "The Present Crises," "Freedom," "To W. L. Garrison," "Wendell Phillips," "The First Snow-Fall," "The Changeling," "Aladdin"; Irving's "Legend of Sleepy Hollow," and "Rip Van Winkle."

For reading: Cooper's "Last of the Mohicans"; Poe's "Gold Bug"; Warner's "A-Hunting of the Deer," "How I Killed a Bear," "Lost in the Woods," "Camping Out."

Course IV. Literature II.

History of English Literature based on Halleck's Text.

(*a*) Masterpieces: For Study: "Macbeth"; Addison's "De Coverly Papers"; "The Ancient Mariner"; Bacon's Essays; Macaulay's "Essay on Addison"; Tennyson's "In Memoriam," and a few of the "Idylls of the King."

(*b*) For reading: Byron's "The Prisoner of Chillon," "The Destruction of Sennacherib," "Maid of Athens,' "Mazeppa"; "Silas Marner," and "Ivanhoe."

(*c*) A number of topical reports will be required and also written reviews of assigned plays and novels.

(*d*) The composition work will be based upon the masterpieces studied and will take the form of critical and biographical essays.

Course V. Literature III—Elective.

(*a*) Advanced composition and rhetoric. Review description and narration. Usage; diction; clearness; force; elegance; paragraphing; principles of versification; periodic, balanced, loose, long and short sentences; figures of speech. Themes in exposition and argumentation.

(*b*) Masterpieces for study; Arnold's "Sohrab and Rustum"; Burns' "The Cotter's Saturday Night" and Other Poems; Carlyle's "Essay on Burns;" Macaulay's "Essay on Milton"; Milton's

Minor Poems and Sonnets; "The Merchant of Venice"; Pope's "Iliad."

(*c*) For reading: "As You Like It"; Scott's "The Lady of the Lake"; Stevenson's "Treasure Island."

(*d*) In this course considerable attention is paid to the study of classical mythology, for which the pupil should have a Gayley's Classic Myths.

Course VI. Literature IV—Elective.

History of American Literature based on Abernethy's text.

(*a*) Masterpieces for study: Aldrich's "Baby Bell," "Ale Yeaton's Son," "Piscataqua River," "The Little Violinist,"c "Our New Neighbors at Poukapog"; Bryant's "Thanatopsis," "To a Water-fowl," "A Forest Hymn," "The Flood of Years," "The Green Mountain Boys," "The Yellow Violet," "To the Fringed Gentian"; Emerson's "Compensation," "Self-Reliance" and "American Scholar"; Higginson's "The Procession of the Flowers," "April Days," and "Water Lillies"; Lincoln's "First and Second Inaugural Addresses," "Gettysburg Speech, ""The Emancipation Proclamation"; Poe's "Raven," and "The Bells"; Taylor's "Lars"; Webster's "First Bunker Hill Oration," and "Adams and Jefferson"; "The Federalist."

(*b*) For reading: Franklin's "Poor Richard's Almanac"; Hawthorne's "House of Seven Gables," "The Marble Faun"; Lodge's "Life of Webster"; Parkman's "LaSalle"; Thoreau's "The Succession of Forest Trees," "The Apples," "Sounds"; Bayard Taylor's "Views A-foot"; Warner's "My Summer in a Garden."

HISTORY AND CIVICS

The courses are arranged to exhibit the essential elements in historical growth; cause and effect; the comparison of events; the growth of institutions; the influence of environment; the value of the past in explaining the present.

Course VII. American History.

Europe in 1492; American colonization; the colonies; their struggles; the American revolution; the Union; the Civil War; industrial growth; expansion.

Course VIII. Civics.

Such study of the constitutional history of the United States from its beginning to the present time and such study of the actual conditions of government in city, state and nation as is essential to prepare young men to become responsible citizens in the Republic.

Course IX. Ancient History.

In this course a short time will be devoted to the civilization of the East, especially the Egyptian and the Hebrew nations. Most emphasis will be put upon the study of Greece and Rome; their religious, political and social institutions; their art, literature and philosophy; their influence upon Western civilization.

The work will be based upon Wolfson's Essentials in Ancient History, but a large number of topical reports from original sources and recognized authorities will be required. Daily throughout the first semester.

Course X. English History.

Since our own history is a logical development of English History, it is fitting that much emphasis should be laid upon that study. This course aims particularly to show the stages in the industrial, social and constitutional development of England. Wars, dates, lists of kings, etc., will be subordinated to the growth of ideas. Daily throughout the second semester.

MATHEMATICS

The aim of all the courses in mathematics is to train the student to think and reason for himself in an accurate and logical manner. To this end many original problems, requiring individual and independent effort, are assigned, and the student's knowledge of the subject is daily tested at the blackboard. Frequent reviews and quizzes are given in order that the various subjects may be thoroughly covered and mastered. In all courses the practical value of the subject is constantly emphasized and to this end blackboard illustrations, geometrical solids, and instruments of various kinds are employed, supplemented by oral explanations and informal lectures. By these means the study of mathematics is rendered easier of understanding and more interesting to the student, while at the same time the utility of the subject and its applicability to problems in daily life are demonstrated. Ample time is devoted to all the courses offered in mathematics in order that the treatment of each may be as comprehensive and thorough as possible.

Course XI. Arithmetic A.

This course is extensive and complete, and it is intended that the whole subject, including arithmetical and geometrical progressions, practical measurements, and the metric system, shall be thoroughly mastered before the student takes up the work in algebra and geometry. Considerable time is devoted to a study of methods, drill, discussion of presentation, practice in preparation, etc.

Course XII. Arithmetic B.

A complete review of the essentials of arithmetic including the fundamental processes, factoring, fractions, decimals, denominate numbers, longitude and time, practical measurements and percentage, together with the best methods of presenting these various subjects to pupils of the public schools. All abstract combinations are preceded, as far as possible, by constructive effort and the work made objective. In the more advanced themes the subjects will be treated as they occur in actual business transactions regardless of text book limits.

Course XIII. Arithmetic C.

Industrial arithmetic. Chief emphasis will be laid upon problems pertaining to the farm. The work will involve factors, fractions, decimals, denominate numbers, practical measurements and percentage. Problems dealing with such themes as the cost of buildings, marketing, measurements, insurance, taxes and banking will be taught in the most practical business-like fashion. Daily through the Winter Term.

Course XIV. Algebra.

All elementary algebra is covered up to quadratic equations, especial emphasis being laid on the fundamental processes of addition, subtraction, multiplication and division. The ralation of arithmetic to algebra is constantly kept in mind and the advantages of algebra noted.

Course XV. Algebra and Plane Geometry.

The first half of the year is devoted to the completion of algebra, which includes the study of quadratics, ratio and proportion and progressions, and also a complete review of the whole subject. Plane geometry is then taken up and the student is thoroughly grounded in the fundamental principles of the subject. Especial attention is paid to original exercises and problems in construction, the object being to develop the student's ingenuity and reasoning powers.

Course XVI. Plane and Solid Geometry.

One-half year is devoted to the completion of plane geometry and the second half year to solid geometry. In order that the latter subject may be more easily grasped and comprehended, geometrical solids are employed in the demonstration of each proposition, and the students are also required, from time to time, to fashion out of cardboard various solids for use in demonstrating problems in construction.

Course XVII. Trigonometry—Elective.

One-half year. This course is elective and is offered to those who are desirous of acquiring a somewhat more complete knowledge of mathematics. Being a very practical subject, it is handled in a very practical way, and the work in the text is supplemented by frequent informal lectures and illustrations. A certain amount of practical measuring and computing is done by the class and a large and varied number of original problems solved. A very complete course is offered, including trigonometric functions, the right triangle, trigonometric analysis, the oblique triangle, circular measure and graphical representation.

SCIENCE

The courses are designed to instruct the student in the facts, laws and methods of nature. The intimate relation that applied science bears to every day life indicates the imperative need of such courses in a general scheme of education.

The biological laboratory occupies a part of the third floor of Carnegie Hall. The room is 30x60 feet, well lighted, and provided with desk room and apparatus to accommodate forty pupils.

The physical laboratory occupies quarters on the fourth floor of Carnegie Hall. It is well lighted and equipped with table room and apparatus, and has, at one end, a dark room 25x35 feet conveniently arranged for experiments in light.

The chemical laboratory is found in the basement of Carnegie Hall. It is sufficiently equipped with table room and apparatus for thirty students working at one time.

Laboratory and field work in the sciences is always a welcome and profitable diversion from continued study and recitation in the class room. The laboratory and field work are carefully directed so that observation and inference may be comprehensive and accurate. The methods of instruction are those of modern laboratories for which the equipment is ample.

The following courses are offered, four years of which are constants for graduation.

Course XVIII. Geography.

A comprehensive and critical review of descriptive geography. The first half of the year is devoted to an extensive comparison of the topographical features, the commercial advantages, and the development of industries of the different countries of the earth.

Course XIX. Physical Geography.

The second half of the year is devoted to a study of the earth as a globe. Especial emphasis is laid upon the study of the constant changes apparent in the earth's surface, the various physical ages of the earth, the underlying causes, and the effect upon mankind. As far as possible the most fundamental principles of this subject are brought out by actual observation in field work.

Course XX. Zoology.

Five hours a week for the first half of the year. The course is designed as a foundation for advanced scientific work. Lectures and recitations cover the principle facts of animal structure and classification. Illustrations are given by means of museum specimens, wall charts, slides and stereopticon views. The student does individual laboratory work studying typical representatives of the main branches of the animal kingdom. Attention is also given to the speculative questions of the science.

Course XXI. Botany.

Five hours a week for the last half of the year. The work covers seed germination, the structure, development and distribution of plants together with a study of the types of various plant groups beginning with the simpler forms. Specimens of the higher form of plants are studied and classified in the laboratory. Especial attention is given to a study of the relation of the vegetable to the animal kingdom.

Course XXII. Agriculture.

Five hours a week for the winter term. Designed to accommodate young men from the farm who enter late in the Fall and leave early in the Spring. Lectures, recitations and experiments. Emphasis is laid upon kinds of soil; soil and water; how plants feed and grow; the selection and germination of seeds; requirements in the growth of seedlings; conservation of moisture; soil fertility; varieties of stock and stock breeding, etc.

Course XXIII. Physics.

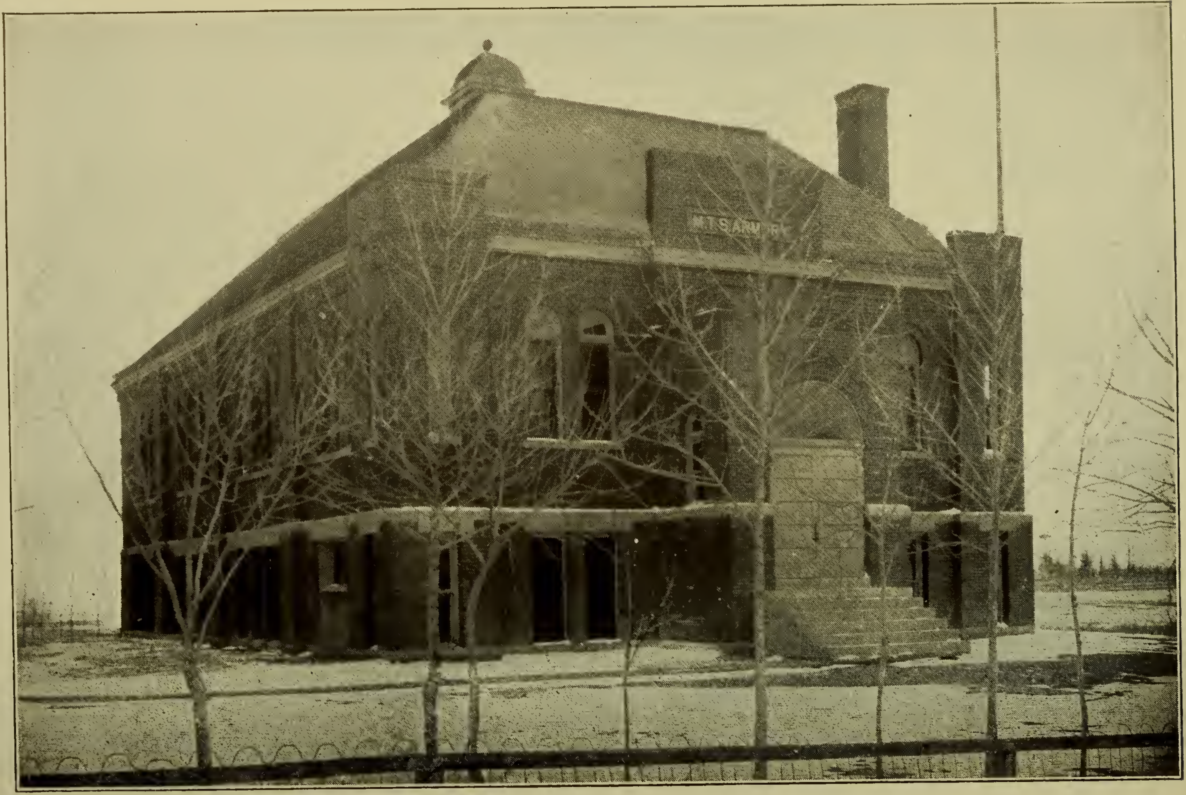
Five hours a week for the year. This course consists of lectures, experiments and recitations. The experiments are simple, yet full and exhaustive. Especial attention is given to the solution of problems involving physical laws and formulae. A series of forty-eight experiments is prescribed and performed by students during the year and careful tabulations are made of the results. Especial attention is given to the fundamentals that lead up to the various courses in engineering.

Course XXIV. General Chemistry.

Five hours a week for six months. Three periods a week are devoted to the study of the laws, theories, formulae and fundamental principles of chemistry and to the solution of problems in chemical arithmetic. Two double periods each week are devoted to laboratory work. Over one hundred experiments involving chemical change, affinity, valence, etc., are performed and noted so that the student both becomes familiar with the manipulation of apparatus and masters the laws governing phenomena.

Course XXV. Elementary Qualitative Analysis.

Five double periods a week for three months are devoted to the analysis of some of the simpler solutions and solids. The



Armory

work is done under the immediate supervision of the instructor. This course is designed to lead up to quantitative and food analysis. Prerequisite Course XXIV .

Course XXVI. Qualitative Analysis.

Daily throughout the Fall term. Designed especially for young women who are pursuing domestic science courses. The essential materials in a complete food; the reactions that occur in their preparation for use; the common adulterations; the foods in which commonly found; how recognized; household tests, etc. Prerequisite courses XXIV, XXV.

Course XXVII. Bacteriology.

Five hours a week for the Spring term. Arranged to meet the needs of domestic science students. Recitations and experiments. The yeast plant is studied in all the important details of its life habits. Especial attention is given to the moulds and bacteria of the household. The life habits of the bacilli, their relations to health and disease, the precautions that should be taken in preventing infection are dealt with extensively.

EDUCATION

Course XXVIII. Elementary Pedagogy.

A brief course in the principles and methods of teaching and general school management offered to students who are unable to remain in school a sufficient length of time to complete a course. This course includes a brief study of the presentative, representative and reflective powers; the ends of education; the means; the principles involved; general methods; methods in particular branches, etc.

Course XXIX. Psychology.

The scope and importance of the subject; the mechanism at the disposal of the mind; sense organs; mind and brain; the laws of mental development; the getting of knowledge and skill and the application of this knowledge in the art of teaching. Emphasis is laid upon mental activity rather than upon mental structure and upon the significance of the initiative, constructive and executive powers in a scheme of education.

Course XXX. History of Education.

A study of the educational systems of the chief nations of antiquity; education in its relation to Christianity; the renaissance, the reformation and the forces operative in our own era; a study of the life and practices of the chief educational reformers in the light of prevailing theories. Numerous outside readings and class reviews are required.

Course XXXI. Philosophy of Education.

A study of the agencies of civilization and the mottoes of growth; the broad conception of education; the biological, physiological, sociological and psychological aspects of education. Especial attention is given to such themes as the Place of the Body in Education, the Influence of Body on Mind, Physical Education, Environment, Racial Experience, and the Notion of Self-Activity.

Course XXXII. Economics of Manual Training.

Spring Term, two periods per week. The organization of manual training in public school courses; aim and practice; the history and literature of manual training; equipment and supplies; correlation; manual training and mental development; instruction and control, etc.

Course XXXIII. Observation and Practice.

Through an arrangement with the Board of Education of the City of Ellendale students from the Normal Department of the State Normal and Industrial School are permitted to observe the work and to practice in certain of the schools of the city. Pupils thus acquire actual experience under conditions similar to those they must meet after graduation. Both observation and practice take place under the direct supervision of a trained teacher, who is thoroughly capable not only of directing the efforts of pupil-teachers but of offering the most helpful and pains taking criticism.

LATIN

The study of the Latin language has given character to modern minds by the habits of discrimination and analysis which it requires, and has largely contributed to the marked advancement of science and reasoning. To represent it as nothing but a criticism of words or an exercise of memory is utterly erroneous. It demands clearness of judgment and admits of operations even of fancy, picturing things of which words are but symbols, and tends to promote quickness and depth of apprehension. The analysis of language cultivates acuteness and pre-eminent literary taste, and inspires the student with a love of research. In Latin is found the strength, precision and order of the old Roman. Attention is given to correct writing, the study of idioms and synonyms, translations into English and the history of its literature. Always the relation of the language to English is kept in mind and similarities noted.

Course XXXIV. Latin I.

The elements. Daily throughout the year. Careful study and practice in pronunciation, a mastery of inflections and syntax, a gaining of a working vocabulary. Translating of simple prose. Much time and emphasis is placed upon the translation of English into Latin. Word formation also receives considerable attention.

Course XXXV. Latin II.

Caesar. Daily throughout the year. Four books; translation into clear idiomatic English; construction of every word; the life of Caesar; the Roman government of his time; the formation of the Roman army; sight reading; prose composition based upon the text of Caesar.

Course XXXVI. Latin III.

Cicero. Daily throughout the year. Six orations: four In Catalinam, De Imperio Pompei and Pro Archia; the Life of Cicero; the history of his time; Roman oratory; syntax of each word; sight reading; prose composition based on the text; memorizing of especial passages of Pro Archia.

Course XXXVII. Latin IV.

Vergil—Elective. Daily throughout the year. Six books of the Aeneid; syntax; grammatical peculiarities; translation into clear idiomatic English; occasional metrical translation; the life of Vergil; the history of his times; the mythology of the Aeneid; the versification of the Aeneid.

GERMAN

The course is designed to enable the student to use this language with facility in ordinary reading, writing and speaking; to supply the mental training only to be obtained by a study of language other than one's own; to give the student a key to the riches of German literature. Accuracy and facility of translation are sought by means of a careful grammatical drill and a generous amount of reading. Composition forms a necessary part of the instruction. Especial emphasis is laid upon the acquiring of a correct pronunciation.

Course XXXVIII. Elementary German—Elective.

For beginners. Special attention is given to correct pronunciation, the principles of grammar, the conversion of simple prose from German into English and from English into German, and to conversation exercises. Joynes-Meissner's Grammar; Guerber's Maerchen und Erzaehlungen; Hans Anderson's Bilderbuch ohne Bilder; Storm's Immensee.

Course XXXIX. German Reading—Elective.

Review of the grammar; practice in translating from German into idiomatic English; written exercises based on a text. Joynes-Meissner's Grammar; Zschokke's Der Zerbrochene Krug; Heyse's L'Arrabiata; Storm's Germalhausen; Benedix' Die Hochzeitreise; Schiller's Der Neffe als Onkel, etc.

MANUAL TRAINING

The State Normal-Industrial School lays special emphasis upon Manual Training. In breadth of courses, comprehensiveness of equipment and thoroughness of instruction it is not approached by any other school in the state. Prospective students and parents are invited to visit our shops and classes at any time

Course XL. Teachers' Manual Training.

Designed to train the mind through the senses; to develop creative ability; and to prepare teachers to carry the work into their own schools. This course extends over three years. The following is a general outline of the work offered for primary, intermediate and upper grammar grades in the English-Manual Training Course:

(1) PAPER CUTTING: For illustration and as a study of form and design. Booklets of different sizes and shapes are made from various papers, the covers decorated, and drawings, notes, clippings, illustrations, etc., are mounted within.

(2) CLAY MODELING: Clay is used in representing typical forms of solids, in modeling from objects, in the study of relief ornament and in the building of small pieces of pottery. Different methods of handling the clay are practiced in the making of a number of bowl or saucer forms; also different styles of candlesticks, vases and jars. The use of incised design is illustrated in the decoration of tiles.

(3) POTTERY AND CEMENT: The elementary pottery of primary grades is continued into more advanced work in the making of decorated fern boxes, soap and match dishes, pitchers, sugar bowls or teapots, large jars and vases. The preparation of clay for class use, the molding and decorating of pottery, the placing and firing of the kiln and the use of glazes form the principle part of the work. Wheelwork and casting in plaster are explained and opportunity is furnished for individual practice. The work in cement includes a study of the properties of the different compositions and the making of arches, bridges, piers, walls and tiles on a small scale.

(4) FREEHAND DRAWING: Practice is given in drawing from flowers, from pose, from parts of machines and from photographs and drawings to develop the ability to use pencil and chalk readily in representing mechanical construction and decorative elements.

(5) PAPER AND CARDBOARD: This includes the making of simple pieces such as labels, thread winders, bookmarkers, pin trays, envelopes, match boxes, comb cases, match scratchers, notebooks, trays and boxes of various design, photo mounts and the like, all of which afford a wide range for accurate expression and a considerable knowledge of constructive design.

(6) WEAVING AND BASKETRY: Through the use of paper strips, yarns, raffia, grasses, rope and rattan the processes of interlacing materials to form various textile patterns and basket forms are illustrated.

The weaving models include paper mat weaving as a study of the building of designs through different interlaces; the weaving of a small cotton towel on a cardboard loom and a woolen rug on a simple wooden loom.

In basketry, several raffia rope and rattan coil stitches are worked out and applied in the making of small baskets. The rattan and splint baskets are made from individual choice of shapes.

Rope and Cord Work include a number of knots and splices, loops, stitches, etc., used in making nets, handbags and the like.

(7) WOODWORK:

(*a*) Problems in selecting, assembling and fastening with glue and brads strips of thin wood to form pieces of furniture, boxes, bird-houses and other articles within the range of the pupils' interest are given, with methods of class presentation and ways of preparing materials for class work. The knife, thus far, is the principle tool employed.

(*b*) Exercises involving the use of simple hand tools are presented in such a way as to prepare the student for teaching wood processes in elementary schools. The principles and practice of knife and bench sloyd, the possibilities of the art crafts, the suggestion of engineering and industrial problems and the correlation with physics, mathematics and art are all made the basis for the course in wood.

(*c*) The work designed for sixth, seventh and eighth grades is planned for the room with special equipment. It involves the use of a set of carpenter's tools in the construction of a series of exercises and projects embodying a sequence of operations; the different saw cuts; the use of the plane in trueing up stock and bringing it to the required size; the various cuts with chisel, gouge, drawshave and spokeshave; the use of brace and bit; different joints and ways of fitting and fastening; methods of finishing and polishing.

Practically all the articles made are useful and have an intimate relation to the life of the pupil. Opportunity is given for the construction of projects to be designed by the student.

(8) MECHANICAL DRAWING: An elementary course for upper grammar grades.

(9) MANUAL TRAINING DESIGN: Type models for the various grades; problems in the various media, etc.

MECHANIC ARTS

The work of this department is essentially practical, since it gives a knowledge of how to do things that are being done in this present age and day. The boy who can plan and build a house or a barn; forge a clevis; repair his father's plow or other farm implement, has a knowledge that means dollars and cents to his immediate advantage. Although this work is practical, and intensely so, yet it is none the less educational, for it calls into action all the faculties of which it can be said that training is given them in school work of any kind, but especially it develops the powers of construction; it is educational because it gives a more correct view of life, for without a fairly good knowledge of industrial work, there can be only an unbalanced and incorrect conception of society, for social conditions are very largely industrial conditions.

The work of this department comprises four years' training in the use of the various tools and apparatus necessary in giving practice in the principal processes of construction in wood and iron.

Equipment.

The mechanical drawing room is equipped with individual drawing cabinets, high grade instruments, mahogany ebony-lined T-squares, amber triangles, a 30-inch x 42-inch blue printing frame, and other necessary apparatus.

The wood shops are equipped with double work benches, individual sets of bench tools, a large assortment of tools for general use, a Fox trimmer, a mortiser, a tenoning machine, a band saw, and eleven turning lathes.

The blacksmith shop is equipped with down-draft forges, anvils, hammers, vises, bench tools, etc.

The molding room is equipped with furnace for melting and shovels, riddles, rammers, bellows, trowels, slicks, lifters, gate cutters, etc.

The machine shop is equipped with a 24-inch x 24-inch x 6-inch iron planer, a 16-inch x 6-foot Hamilton engine lathe, three smaller engine lathes, drill press, power hack-saw, emery grinder, eight filing and chipping vises, tool grinder, power grindstone, and a caseful of tools and instruments used in connection with machine work.

Course XLI. Joinery.

(*a*) Care and use of tools. Application of the common hand tools used by carpenters and joiners, such as saws, planes, filister, chisels, hammer, square, marking guage, bevel, boring bits and other hand tools, in the construction of the principal joints employed in carpentry and joinery.

(*b*) When some proficiency has been gained in joinery, useful articles are made, either for the use of the school or for the student.

(*c*) Class to construct a project in cabinet work, such as a desk, table, bookcase or other piece of useful furniture, in order that they may make further application of the principles they have learned.

Course XLII. Carpentry.

Care and use of tools; forms of joints employed in making articles for home and farm use; timber splices used in the construction of buildings; stair and rafter cutting; the construction of a model of the whole or part of a building: Daily throughout the Winter Term.

Course XLIII. Turnery.

The course in wood-turning includes (a) center, face-plate, screw, hollow chuck and template turning, including exercises through which the difficult problems in lathe work are mastered.

The course includes the cylinder, cone and V grooves, concave curve, convex curve and compound curve, also hollow turning, together with exercises combining either a number, or all, of these operations; (b) useful articles in which the principles learned in (a) are applied, including a box with cover, a vase, handles for various tools, a mallet, spindles for porch work or furniture, stair balusters and various other articles of utility. This work is carried further in its application in pattern making.

Course XLIV. Forging.

(a) Practice in drawing out, bending to shape, forming angles from straight pieces, swaging, fullering, and various forms of welding iron and mild steel. (b) This course includes a number of useful articles, including a bracket, a brace, a shackle, swivel, tongs, hook and chain, clevis, cold chisel, heading tool, bolts, cape-chisel, punch and hammer.

Forging is carried further in fourth year work, in making and tempering machine tools.

Course XLV. Blacksmithing.

Care of the forge fire; drawing, bending, upsetting, swaging, and the different forms of welding of iron and steel; the tempering of steel; the application of the foregoing processes in the making of articles for farm use such as hooks, chains, ring-bolts, clevises, irons for neck-yoke, whiffletrees, etc., cold chisels, punches, cape chisels, hammers and tongs; the equipment of a serviceable blacksmithing outfit. This course also includes a number of exercises in soldering and brazing, designed to give the student a knowledge of these arts sufficient to enable him to make ordinary repairs. Daily throughout the Winter Term.

Course XLVI. Pattern Making.

(a) In all this work especial consideration is necessarily given to the work of the foundry, which is to follow. Patterns are made of a number of models which involve the more elementary problems in foundry practice; these are followed by patterns or parts of machines, including a hand-wheel, cam, gear-wheel and bevel-gear.

Course XLVII. Foundry Practice.

Supplementary to the course in pattern making, and the patterns made in Course XLVI are cast here. Casting is done in plaster and soft metal.

Course XLVIII. Chipping and Filing.

(a) Exercises are given for the purpose of developing skill in the use of the file and the cold-chisel. These tools are of especial value in almost every line of mechanical work, as, for instance, in the erecting or repairing of machinery, whether in the city or on the farm. Their usefulness is so well known, and the inability of the average man properly to use them is also so well known, that it seems proper to give them especial attention in this course. (b) In connection with and in addition to the above a number of useful articles are made from sheet steel.

Course XLIX. Machine Shop Practice.

(*a*) MACHINE TOOL MAKING: Students make and temper the tools which they will use in Machine Tool Practice.

(*b*) MACHINE TOOL WORK: Explanation of the different forms of machine tools, directions for operating and keeping tools in order; practice in centering and in plane, taper, and template turning, chucking, drilling, boring, external and internal thread cutting; hand tool turning, polishing and filing.

(*c*) TOOL AND SCREW MAKING: Use of the lathe, planer, milling machine, indexed center, hand tools, standard guages, micrometer, and Vernier calipers in the construction of reamers, taps and dies, machine screws, nuts, studs and formed work. In this course the machine work is done on the articles cast in the foundry during the preceding year. The greater share of the machine tool practice of the entire course consists in machining the products of the foundry.

(*d*) Class to do the machining and erecting of a small engine, a lathe, or some other project involving similar operations.

Course L. Mechanical Drawing—First Year.

(3 hours per week)

(1) INSTRUMENTAL DRAWING: (a) Proper care and use of instruments, with practice exercises to gain facility in line work. (b) Plain freehand lettering.

(2) GEOMETRY: A knowledge of geometric terms, also mastery of geometric problems commonly met with in mechanical drawing; especial attention given to accuracy of construction.

(3) ORTHOGRAPHIC PROJECTION: A knowledge of the use of planes of prejection. This work, which is a part of descriptive geometry, is the immediate foundation of mechanical drawing. In connection with it students are required to bring to class shop sketches of working drawings of various articles. Instrumental drawings are made from some of these freehand drawings.

Course LI. Mechanical Drawing—Second Year.

(3 hours per week)

(1) ISOMETRIC AND CABINET PERSPECTIVE: Practical problems.

(2) DEVELOPMENT OF SURFACES: A continuation of course (3) in first year mechanical drawing, comprising a number of problems in descriptive geometry, with the especial view to the representation of oblique surfaces, as, for instance, the roof of a building.

(3) ARCHITECTURAL DRAWING: Original plans for a two-story frame dwelling or other frame building. This course is made very practical. After the rough sketches have been made, the floor, the basement and footing plans are drawn to scale, also sectional wall views showing the construction; and at least two views of the completed structure—the drawings including roof plan and longitudinal and lateral sections. Specifications are drawn up and an estimate of the cost of building materials and labor is

made. Tracings and blue prints are made of the complete set of plans. Special students are carrying this work further and are actually building models in the shop at the scale of two inches to the foot, in which the methods of construction are identical with those used in actual house building.

Course LII. Mechanical Drawing—Third Year.

(3 hours per week)

(1) LETTERING AND CONVENTIONAL REPRESENTATIONS of frequently recurring parts of machinery, such as nuts, threads, fastenings, etc.

(2) MACHINE SKETCHING AND DIMENSIONING: Sketches in projection of complete machines and of detailed parts, with correct dimensions supplied from measurements. Sketches to be neat and clear, and dimensions properly placed.

(3) WORKING DRAWINGS FROM SKETCHES: Finished working drawings from sketches in preceding course. Some drawings to be inked, others to be traced, and from the tracings blue prints made.

Course LIII. Mechanical Drawing—Fourth Year.

(3 hours per week)

(1) DESCRIPTIVE GEOMETRY: Graphical methods of solving problems of lines, planes, surfaces, and solids, and their application in sheet metal pattern making. Problems include patterns of stovepipe elbow, a chimney cap, a T and a Y joint. All articles in this course, of which patterns are made, are constructed either of metal or paper.

(2) PERSPECTIVE: Problems in linear perspective.

(3) Preceding course carried forward to its application in the making of perspective drawings of machines (or buildings) from working drawings.

(4) MACHINE DESIGN: Students to make original design of some mechanical applicance or machine.

DOMESTIC ARTS AND SCIENCE

The course is designed to afford instruction in the subjects which pertain to life in the home. The training to be obtained through motor activity is regarded as one of the principal educational functions of both domestic science and art; the sociological and ethical value of such work is emphasized.

The department occupies the entire second floor of the Manual Training Building. It consists of sewing room, kitchen, dining and recitation room and fitting room.

The sewing room is large, well lighted and commodious. It is equipped with sewing machines, lockers, charts, cutting tables, individual tables, wall cases for the purpose of exhibiting the work, etc. The best fashion magazines are received regularly.

The kitchen is supplied with desks for individual work, equipped with all the necessary cooking utensils; gas stoves for individual use; gas range; wood range; refrigerator; cupboards; kitchen cabinet; sink, and the cooking utensils necessary to provide the best facilities for class work.

The dining room is equipped with dining table, dining chairs, china closet, buffet, etc. It is also supplied with china, silver, linen etc.

The recitation room is supplied with reference books, charts and magazines devoted to the subject of domestic science.

Course LIV. Hand Sewing.

Study of stitches and materials. Training in accuracy of measurement. Basting and running. Hems. Seams. Gathering and putting on bands. Patching and darning. Button holes. Exercises in hemstitching and featherstitching. Draughting and making underclothes. Making of dainty underwear of all kinds.

Course LV. Machine Sewing.

Care and use of different kinds of sewing machines. Making suit of underwear or its equivalent. Cotton shirt waist and dressing sacque.

Course LVI. Dressmaking A.

Measuring, drafting, cutting and fitting waists. Button holes, hook and eyes; loops and eyelets. Study of form and color in dress. Planning, purchasing and making simple house and walking dress. Collars. Remodeling and mending.

The length of time needed to complete any given course depends entirely upon the skill and industry of the individual student, and the amount of time per day that she can command. Students will be expected to provide material for all garments.

New Twentieth Century Tailor System.
Conger's Skirt Cutting System.

Course LVII. Dressmaking B.

Daily throughout the Winter Term.

(*a*) Measuring and drafting patterns to measure. Care and use of sewing machine. Study of materials. Tests for woolen, cotton and silk goods. Shrinking and pressing.

(*b*) Shirt waists. Embroidered and fancy waists. Fitted linings. Bastings. Sleeves, plain and fancy.

(*c*) Drafting skirt to measure. Finish of skirt; lining, bands, plackets, facings, etc. Skirt difficulties; figures requiring special measurements; adaptation of styles and patterns to individual requirements.

(*d*) Hand and fancy stitches used in dressmaking. Standard fastenings; button holes, hooks and eyes, loops, eyelets, lacings, blind fastenings, ornamental fastenings, use of whalebone, featherbone, etc.

(*e*) Childrens' garments. Cutting and making underwear. Wrappers and kimonos.

(*f*) Color and form in dress. Mending and remodeling. Estimates of the cost of garments.

Course LVIII. Elementary Cookery.

Care of stoves and ranges. Fuels. Classification of foods. Principles of cooking. Boiling and steaming. Roasting and broiling. Frying. Cereals. Batters and doughs. Baking powders. Yeast. Breadmaking. Plain pastry. Vegetables. Planning and serving simple meals. Introductory study of food materials and food values.

Mrs. Lincoln's "Boston School Kitchen Text Book."

Course LIX. Advanced Cookery.

Pickles, jellies and preserves. Canning. Care and preservation of foods. Fancy dishes. Oysters. Salads. Soups. Entrees. Pastry. Review of breadmaking. Menus. Planning and serving meals. Study of the composition, nutritive value and cost of various foods.

Course LX. Marketing and Serving Meals.

Marketing for, preparing and serving, three meals by each group of girls. A certain amount is allowed, and from this, provision must be made for six guests. The members act as host, hostess and waiters.

Course LXI. Home Sanitation and Economics.

Some essentials of the home. Situation and surroundings of the house. The water supply. Furnishing. Daily routine of house work. The laundry. Heating and lighting. Table service. Marketing. Sanitary and artistic furnishings. Wall coverings. Treatment of floors. Use and abuse of ornament. Household pests. Dietetics, etc. Daily throughout the Winter Term.

Course LXII. Invalid Cookery and Home Nursing.

The furnishing, warming and ventilating of the sick room. Bathing, dressing and administering food and medicine to patients. Bed making. Lifting and caring for helpless patients. Preparation and application of poultices. Use of disinfectants. Care of sprains, cuts and bruises. Emergencies. Nutritive value and digestibility of foods as affected by apparently unimportant conditions in their preparation. Special diets. Preparation of dishes suitable for sick and convalescent.

DRAWING AND FINE ARTS

The department offers thorough instruction in fine and decorative arts. The Fine Art Studio is located on the second floor of Carnegie Hall, and there is an ample equipment of casts and studio furnishings. The department aims to give thorough instruction in the principles of drawing and painting; to enlarge the student's acquaintance with what is best in art; to offer courses of instruction adapted to the needs of teachers in the public schools and supervisors of art instruction in city schools. With serious study a high degree of efficiency and technical knowledge may be attained here at a much less expense than would be incurred for similar instruction in a large city.

Course LXIII. Freehand Perspective.

General art course. Affords opportunity for the student to gain a knowledge of the fundamentals; pencil and charcoal drawings from objects; foreground, middle distance and distance; how distance is expressed in size, color, etc.; flower and plant growth in values and color; action lines; animal sketching; still life; perspective and working drawings. The work is done chiefly from fruit, flowers, still life and living models. Students sufficiently advanced may undertake the study of oil and water color painting. Daily throughout the year.

Course LXIV. Normal Course.

Designed to prepare teachers to give art instruction in the public schools. The training is made to conform to the accepted educational philosophy of the present. An attempt is made to have the work educationally sound, artistically correct, and so planned that the student may adapt it to the different stages of the child's ability to comprehend and express. The course embraces pencil, charcoal, pen and ink, and wash drawings from objects, arrangements in still life, casts, living models, etc.; oil and water color painting, the study of design, etc. Daily throughout the year.

Course LXV. Design and Composition.

The students are given training in proportion, principality and subordination, theory of light and dark, harmony and in the developing of patterns. These principles are illustrated by designs for book covers, wall papers, silks, stained glass, etc. Special work is given in applied design as, for instance, for China, embroidery, pyrography, etc., as well as in illustrative compositions, landscapes and interiors.

Course LXVI. Clay Modeling.

To train in form of ornament and appreciation of line and mass; work from casts, manufactured objects and from vegetable and animal life.

Course LXVII. Water Color.

Instruction in painting in water from flowers, landscapes and still life groups. All criticism is individual, giving the student opportunity to advance as rapidly as he is capable.

Course LXVIII. Oil Colors.

The entire course is arranged to give variety to the work the conception of which is power of expression in the various media. The method of instruction is individual. Daily throughout the year.

LIBRARY SCIENCE

The library is properly regarded as one of the distinctive educative forces of the Normal-Industrial School. To be educated in the friendship of books, to find rest and inspiration in communing with the most choice spirits of all times, and to gain needful strength for the contests of life are among the possibilities in a well ordered library. The courses in library science extend over two years and embrace the following lines of instruction:

Course LXIX. Library Economy I.

Instruction in alphabeting; numbering; cataloguing; decimal classification; current periodicals; library handwriting; reference works; accessioning; binding and rebinding; book selection and book buying; maps, government documents, etc.; practice. Daily throughout the year.

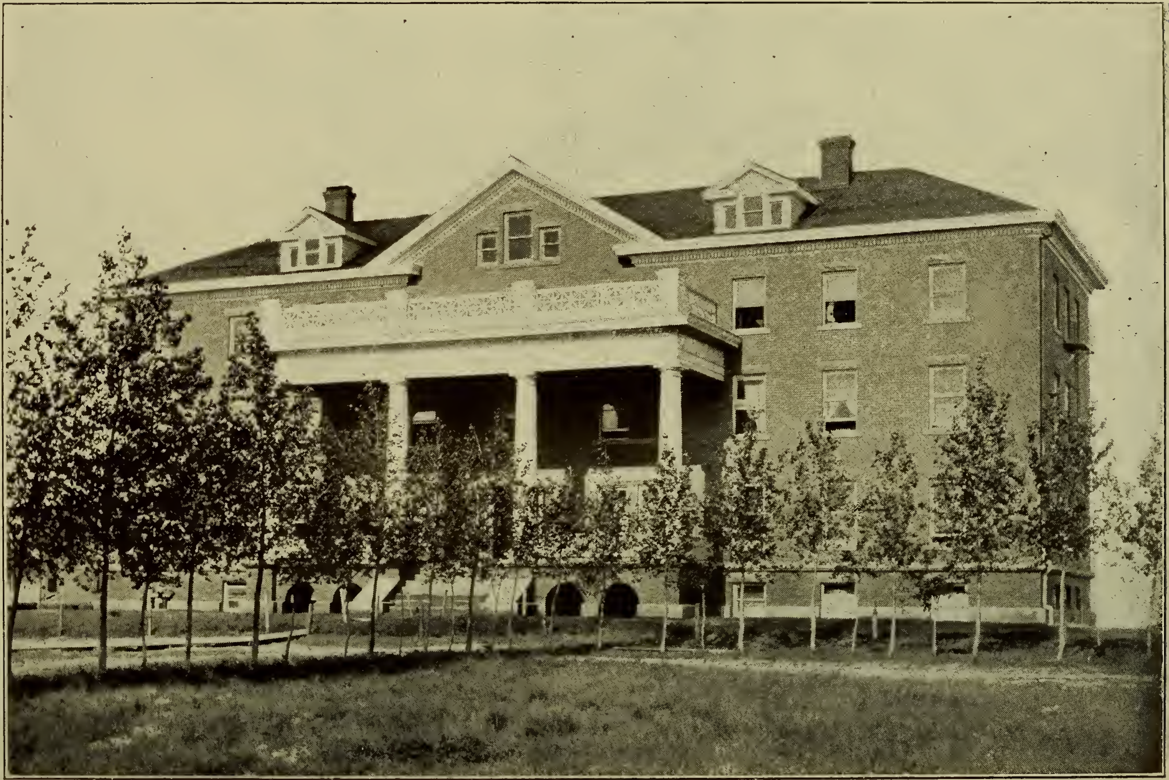
Course LXX. Library Economy II.

Cataloguing; childrens' department; current periodicals; loan systems; shelf-listing; trade bibliography; indexing; stock taking; appraisal of fiction; reference work; supplies and statistics, etc.; practice. Daily throughout the year.

STEAM ENGINEERING

The aim of this department is to give a sound theoretical and practical training to young men who seek to prepare themselves to become steam engineers, firemen, steam fitters, etc. The courses are especially designed for those interested in automobiles, steam or gas engineering apparatus of any kind.

EQUIPMENT: Excellent facilities are supplied for experimental work in steam engineering. Well equipped wood, iron shops and draughting room are at the disposal of students together with ample apparatus for theoretical and practical demonstrations. Among other special apparatus are included a Case traction engine; a twenty-horse power horizontal side-crank Howell engine; McVicar twenty-horse power gas engine; International Harvester Co.'s four-horse power portable gas engine; Gaar-Scott Co.'s dismounted traction engine; Crosby steam indicators; Crosby gas engine indicator; Parr fuel calorimeter; Junker gas calorimeter; Carpenter separating calorimeter; Carpenter throttling calorimeter; Orsat apparatus for flue gas analysis; Hempel apparatus for gas analysis; Crosby steam



Dacotah Hall

gauge tester; Derry-Collard valve card apparatus; viscometer; assayer's balances; thermometers; manometers: Prony brakes; platform Fairbanks' scales; wheelborrow scales; steam pumps, injectors, etc.

Two courses are offered as follows:

Short Course

Course LXXI. Steam Engines A.

Daily throughout the Winter Term.

(*a*) STEAM ENGINES: The study of different types of engines and of valves and valve gears; valve setting; the use of the Prony break and indicator in determining efficiency, and a thorough study of the indicator card; a study of governors, their setting and regulation; stationery and traction engine practice.

(*b*) BOILERS: Study of the more common types of boiler; the safety valve, feed-pump and injector; calibration of pressure gauges; boiler testing; boiler repairs; safety devices; boiler compounds; a comparison of available fuels and their proper use in firing; boiler practice.

(*c*) GAS ENGINES: Theory of the gas engine; study of types adapted to farm use; testing for efficiency and the proper adjustment of working parts; gas engine practice.

(*d*) POWER TRANSMISSION: The various methods employed in the transmission of power and the application of the more common types; shafting and bearings; practice in babbitting; couplings; pulleys; tooth and friction gears; clutches; rope, cable and chain drives; belts and belting; splicing and lacing; practical problems in figuring the size and speed of pulley for required conditions of work.

(*e*) LUBRICANTS: Talks on the properties of different kinds of oils for lubricating purposes and their adaptability to various conditions of work; the viscometer.

Regular Course

Course LXXII. Traction Engineering.

First year, Fall Term, daily.

The first month is devoted to the theoretical and practical study of gasoline engines to enable the students to become experts in operating such engines as are used on the farm. The remainder of the term is devoted to the study of the traction engine, emphasis being laid upon its proper care, adjustment and operation; the proper use of fuels in firing; the governor, injector and feed pump, etc.

Course LXXIII. Steam Engines.

First year, Winter Term, daily.

Elementary Thermo-Dynamics; experimental work with the indicator, and a thorough working up of the card; a study of methods employed in efficiency tests; condensers, governors and types of engines.

Course LXXIV. Steam Engine Laboratory I.

First year, Fall Term, one hour per week.

Elementary engine practice; determination of dead center; valve setting; determination of valve and piston leaks; clearance. Also a study of injectors and pumps and practice in their repair and adjustment.

Course LXXV. Steam Laboratory II.

First year, Winter Term, one hour per week.

(*a*) Efficiency tests for steam and gas engines by means of the indicator and Prony break; the use of the planimeter; valve setting; calibration of instruments.

(*b*) Calorimetry of steam and fuels; flue gas analysis; oil testing and boiler tests.

Course LXXVI. Boiler Practice and Steam Heating.

Second year, Fall Term, daily.

Study of steam boilers and boiler efficiency; heating surface, grate surface and steam space; methods of heating buildings by steam; problems in estimating required radiating surface to heat rooms of given sizes and given conditions.

Course LXXVII. Materials of Engineering.

Second year, Winter Term, three periods per week.

This course is included in the third year shop work of the Mechanic Arts Course and is a study of the properties of materials used in mechanical construction and practice in the principal methods employed.

Course LXXVIII. Valve Gears.

Second year, Spring Term, daily.

A thorough study of the slide valve mainly by means of the

Billgram diagram; the design of equalizing devices and a study of the link motion.

COMMERCIAL ARTS

We live in a great commercial country and there is today a rapidly increasing demand for trained men and women. Bookkeepers, Stenographers, Typewriters, Clerks and Office Assistants are needed in every avenue of business. The time required to fit one's self in these lines is so comparatively short that any young man or young woman can afford to avail himself or herself of the opportunity. One drawback has been the expense. Few young men and women feel that they can afford the excessive fees charged by the numerous business schools. Such schools are organized as a business venture; they offer instruction in but a few branches and have no other means of support. Living expenses are high and the tuition for the various courses often seems excessive. The State Normal-Industrial School is located in a school town; living expenses are reasonable; there is no tuition to pay in a state school; the courses are thorough, practical and comprehensive.

Business Course

Bookkeeping	Business Forms
Business Arithmetic	Penmanship
Spelling	English
Civil Government	Correspondence
Commercial Law	Mimeographing
Commercial Geography	Rapid Calculation

Course LXXIX. Bookkeeping.

The forms used in this course are those of the largest, best known and most progressive business firms in our cities. The student begins with double entry, learning to journalize, post, take a trial balance, close the ledger and make a balance sheet and statement of the personal accounts. He then begins with single entry, learns to change the books from double to single entry and vice versa, and becomes familiar with the day book, journal, cash book and special ruled journals and cash books. He is trained in the use of partnership sets, special ruled books, bill books, invoice books, sales books, retailing, wholesaling, and during the latter part of the course the time is devoted to the lumber business, banking, and the building and loan business. Careful instruction is given in writing commercial papers and business forms such as promissory notes, drafts, checks, orders, receipts, etc. The instruction is individual and students can enter at any time of the school year.

Course LXXX. Spelling—Penmanship.

Fall and Winter Terms.

(a) Spelling is made one of the important subjects. Work is given in both written and oral spelling. The class is carefully drilled in pronunciation and in the marking and defining of words. A text-book is used.

(b) Students are taught the plain, rapid and legible style of penmanship which the business world demands. Instruction is given regarding position of body, hand, pen, paper, movements and best letter forms.

Course LXXXI. Commercial Geography.

Spring Term.

The instruction in commercial geography covers the natural and industrial resources of all important countries, the routes and means of communication, imports and exports, the consular service, etc.

Course LXXXII. Commercial Arithmetic.

Daily, Fall and Winter Terms.

A thorough review of the entire subject with special reference to the needs of accountants. Fractions, decimals, denominate numbers, percentage, interest, partial payments, stocks, insurance, etc., are reviewed and business methods and rapid calculation given special attention.

Course LXXXIII. Commercial Law.

The student is taught that every person is amenable to the law and entitled to its protection, and that he should have a reasonable knowledge of it in so far as it may apply to contracts, agencies, partnerships, sale of goods, bailments, negotiable instruments, interest, usury, transportation, guarantee, surety, corporations, joint stock companies, insurance, real estate, etc., and a wholesome regard for its enforcement.

Stenographic Course

Stenography	Typewriting
Punctuation	Penmanship
Spelling	Manifolding
Filing and Indexing	Office Practice

Court Reporting

"If I was fifteen years old again and wanted to earn $25,000 a year in some great business by the time I was thirty, I would enter some manager's office as a stenographer. There is no quicker or easier road to success." Frederick Ireland, Official Reporter, United States House of Representatives.

Young men and young women can not engage in a more lucrative calling than shorthand reporting. Stenographers have unequaled opportunities for advancement. Whenever promotions are made the stenographer, from the very nature of his occupation and having become familiar with all the principles and methods of the business in which he is engaged, steps into the best paid departments. If the student has a thorough knowledge of the common branches, is a good speller and has a fair knowledge of business English, he will be able to complete the Stenographic Course in a single year. Lacking these essential qualifications it is a waste of time to attempt this course.

Course LXXXIV. Shorthand.

Students desiring to pursue this subject should enroll at the beginning of the school year. This course embraces a thorough drill in combining the signs into words, phrases and sentences, drills for speed, practice in transcribing notes, class and office dictation, and in the training necessary for the amanuensis and reporter. The Munson system of shorthand is taught together with such improvements as have stood the test of the most severe requirements of the reporter's art. The debating clubs, chapel exercises and the routine of the county court, when in session, furnish excellent opportunity for practice. A phonograph is used for advanced dictation.

Course LXXXV. Typewriting.

"Touch" typewriting: That is, the student does not depend on watching a lettered keyboard, but operates the machine perfectly, because he has a thorough knowledge of the position of every key, thereby gaining speed and accuracy and lessening the strain upon himself. He is required to become proficient in transcribing his shorthand notes, in copying, stenciling, and be able to take dictations from the teacher or from the phonograph. When competent, he has actual business practice. The president's office, the faculty and the different organizations of the school supply this department with different kinds of work.

VOCAL MUSIC

The course in vocal music is designed to afford a thorough and comprehensive training in the elements; to secure accuracy and rapidity in sight reading and singing; to develop a taste for the best grades of music, and to prepare students to teach the subject systematically in all grades of the public schools.

Course LXXXVI. Public School Music.

Designed to enable students to teach such principles of music as will apply in the several grades of the public schools. Instruction is given in time, tune, technique and the aesthetics of music. These subjects are exemplified in practice. Emphasis is laid upon the elements, theory of scale formation, melodic construction, elements of notation and harmony. The student becomes thoroughly familiar with the best in grade music. Daily throughout the year.

Course LXXXVII. The Elements—Elective.

This course is arranged especially for those students who have had no instruction in vocal music and who desire to acquire a limited amount of technical training and at the same time to enjoy ample opportunity for practice. The percentage of people who cannot be taught to sing is exceedingly small. It is estimated that 90% of Americans can be taught to sing well. In Germany and other European countries where, for generations, music like reading has been a part of the school course 98% of the people sing. A course in vocal music under competent instruction will add vastly to one's appreciation of life. This course embraces instruction in the elements, sight reading, ear training and abundant practice. Daily throughout the year.

Course LXXXVIII. Choral Singing.

Daily chorus practice for a brief period is given the entire school. This class is made up of the entire body of students and attendance is compulsory. Constant practice is had on such compositions as lie within the range and understanding of the pupils. Daily throughout the year.

INSTRUMENTAL MUSIC

Six large pleasant rooms on the third floor of Carnegie Hall are set apart for this department. The school owns seven pianos which are supplemented by rented ones for the use of students who are unable to practice at home. Students take weekly lessons and practice two periods—one and one-half hours—per day. Second year students doing creditable work are given opportunity to participate in public recitals, two or more of which are held each year. The following course is subject to change and substitution:

Course LXXXIX. Preparatory.

Course in hand culture; elementary scale work; Kohler's or Landon's Practical Method; Diabelli, Op. 25; Streabog Melodiques, Op. 63; Diabelli, Op. 140; pieces of Lichner, Orth, Webb, Behr, Dennee and others; sight reading.

Course XC. First Year.

Selections from Mason's Touch and Technique, Vol. 1; major and minor scales; arpeggios and chords; Mathew's Graded Materials, Grades 1 and 2; Lemoine, Op. 37; Duvernoy, Op. 120, Bk. I; Mathew's Preparatory Studies in Phrasing; Clementi Sonatinas; pieces by Jungmann, Von Wim, Kolling and others; sight reading.

Course XCI. Second Year.

Mason's Touch and Technique; scale and arpeggio work continued; Mathew's Graded Materials, Grades 3 and 4; Schumann, Op, 68; Heller, Op. 47; Heller, Op. 46; Kuhlau Sonatinas; pieces by Bach, Bachman, Jensen, Meyer, Helmund, Chaminade, Mendelssohn and others; sight reading.

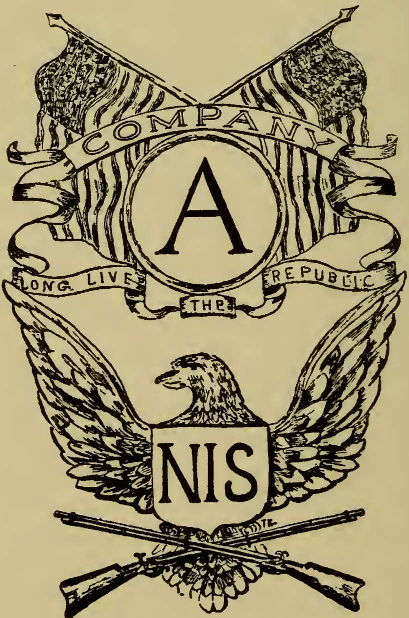
Course XCII. Junior Year.

Advanced technical studies; Krause trill studies; Mathew's, grades 5 and 6; Mendelssohn's Songs Without Words; Sonatas by Haydn and Mozart; Bach preludes and two-part inventions; Chopin waltzes; pieces by. Heller, Godard, Grieg, Nevin, Mac Dowell, Foote and others; studies in harmony; studies in musical history; sight reading.

Course XCIII. Senior Year.

Studies in harmony and musical history; Mathew's, grades 7 and 8; Moscheles, Op. 70; Chopin etudes; Bach inventions and fugues; sonatas by Mozart and Beethoven; selections from Weber, Liszt, Mendelssohn, Chopin, Schumann and other classic writers.

MILITARY SCIENCE



By an Act of the Legislature the State Normal-Industrial School is required to give theoretical and practical instruction in Military Science and the company organized and drilled is subject to regular inspection by the Adjutant General of the State. In harmony with this provision young men are drilled regularly in the schools of the soldier, squad, platoon, company, battalion and the ceremonies.

(1) ORGANIZATION: The cadet battalion at present comprises, with the Commandant, one cadet Captain, one cadet First Lieutenant, one cadet Second Lieutenant, five Sergeants, one color Sergeant, six Corporals and one Artificer. A singler perma-

nent company is maintained under the name of Company A.

(2) EQUIPMENT: The State Normal-Industrial School is supplied with U. S. Remington rifles and accoutrements; Winder target rifles; United States regulation sabers and belts for cadet officers; silk battalion flag, United States regulation; ammunition, consisting of cartridges for target practice and blank cartridges for use in volley firing and skirmish drill, and rifle range.

(3) APPOINTMENTS AND PROMOTIONS: The officers and non-commissioned officers are selected from among those cadets who have been most studious, soldier-like and faithful in the performance of their duties and who have been most exemplary in their deportment. The Commandant and the Commissioned Officers constitute the Board of Examiners for the appointment and promotion of privates and non-commissioned officers.

(4) MILITARY DIPLOMA: Commissions and warrants are issued to the commissioned and non-commissioned officers who are duly examined and deemed worthy of promotion provided, however, that they have drilled at least one term as officers, havebeen promoted to higher rank, have received an average of not less than 70% and have participated in at least one annual military contest.

(5) UNIFORM: A uniform of prescribed pattern is worn by all cadets. This is compulsory for all students enrolled in courses requiring attendance for more than a single term. This uniform consists of blouse, trousers and cap of cadet gray color, modeled after the United States Military Academy uniform and is made in two qualities costing, respectively, $10.85 and $12.85. The uniform is tailor made, of strong material, and is as neat, durable and economical a suit as the student can obtain for this amount. It may be purchased at the school, at actual cost, or elsewhere as the student elects. Uniforms and gloves are worn at all regular drills and inspections.

(6) ATTENDANCE: Five terms of military drill is required of all boys, unless excused on account of physical disability. A physician's certificate must accompany such excuse. The standing of each cadet is averaged at the close of each term. The chief items considered in determining the grade are attendance, deportment and drill. Only those cadets whose average is above 70% for the five terms will be exempt from attendance.

(7) ANNUAL MILITARY CONTEST AND PRIZES: An annual military contest is held at the close of the Winter Term. There are

four events: Company Drill and Inspection; Officers' Saber Drill; Squad Drill; Individual Contest Drill. For each drill at the annual military contest there are three judges selected by the President and Commandant. The squad receiving the highest percentage in contest drill is presented with a silk ribbon, suitably inscribed, which is attached to the battalion colors and the members of the squad receive honorable mention in the catalogue. The prize for the best drilled man in the individual contest is a silver medal, for the second best drilled cadet a bronze medal, and each receives honorable mention. The individual contest is open to all members of the battalion. All cadets who take part in the annual military contest must appear in full regulation uniform.

In the contest of 1909 Gust Blomquist was the winner of the gold medal and Dwight Crabtree of the silver medal. The second squad, winner in the squad contest, was composed of Lieut. Edward Porter (commanding), Sergeants Gust Blomquist Paul Saunders and William Crist, Corporals Frank Dales, Willie Boom, Leigh Porter and Christ Smith and Private Lee Newton.

Course XCIV. Military Science.

Two periods per week for five terms; 6 pts. credit.

Theoretical and practical instruction in infantry regulations; manual of arms; school of the company and squad drill, bayonet exercises; saber drill; guard duty; small arm firing; battalion parade; reviews, etc.

PRIZES

As an incentive to superior work the following prizes are oepn for competition to all students:

(1) PRIZE IN ORATORY: The First National Bank of Ellendale offers a gold medal to the student who obtains first place in oratory under such rules as a committee of the faculty may prescribe.

(2) MILITARY PRIZE: (First) The State Normal-Industrial School offers a silver medal to the cadet who wins first place in individual drill at the annual military contest.

(3) MILITARY PRIZE: (Second) A bronze medal offered by the State Normal-Industrial School to the cadet winning second honors in the individual drill at the annual military contest.

(4) MECHANIC ARTS PRIZE: The King Lumber Co., offer a

fine steel Atkins saw to the first year student in Mechanic Arts designing and constructing the best piece of original woodwork.

(5) DECLAMATORY PRIZE: Mr. F. L. Walker, President of the Board of Trustees, offers a silver medal to the student who obtains first place in declamation under such rules as the faculty may prescribe.

(6) ORIGINAL STORY PRIZE: This prize, given by W. M Kern, is a gold medal and is awarded to the student who prepares the best original story.

PHYSICAL TRAINING

The primary purpose of the State Normal and Industrial School is the harmonious development of the entire boy or girl. Athletics and sports have a place in the development of every normal person and receive proper encouragement and supervision. Physical training is compulsory; two periods per week for five terms. Each student, before entering the gymnasium, is given a physical examination. The condition of heart, lungs, digestion, nervous and muscular system, carriage, etc., is noted and indicated on a chart. This enables the instructor to prescribe special exercises for individual needs. Each student must be provided with a light gymnasium suit of prescribed pattern. There is a fee of fifty cents a year.

Course XCV. Physical Training.

(*a*) FOR YOUNG MEN: Two periods per week for five terms; 6 pts. credit.

Regular systematic exercises in all forms of light gymnastics, both with and without apparatus; free-hand exercises; sports. Foot ball, basket ball, base ball, and tennis are available in season.

(*b*) FOR YOUNG WOMEN: Two periods per week for five terms; 6 pts credit.

Under the instruction of a woman teacher. The exercises are similiar to those for boys, consisting of dum-bell and barbell training, club swinging, marching, running, exercises with light apparatus, etc. Basket ball is given a fair share of the time.

General Information

LOCATION AND EQUIPMENT

THE plant of the State Normal and Industrial School consists of four main buildings and a power plant and engine laboratory.

Carnegie Hall.

This is a four-story pressed brick structure, beautiful and commodious. In it are found the Departments of Science, English, Mathematics, Commercial Arts, Fine Arts, Instrumental Music and the Library. In each department the equipment is such that students may reap the most generous returns from their efforts. Physics, Chemistry, Biology and Physiography are taught in laboratories in the most approved manner; the Department of English has access to abundant literature; the Commercial Department is provided with typewriters, duplicators, Edison dictation phonograph records, etc.; the Department of Music owns seven high grade pianos and supplements these with rented instruments; the Department of Fine Arts is equipped with easels, drawing desks, tables, a large number of casts, lockers, kiln for burning china, etc.; the library is generously provided with fiction, history, biography, scientific works, reference texts, etc., is equipped with a cabinet finding list and Poole's Index and is gradually accumulating bound volumes of the standard magazines.

The Manual Training Building.

A three-story red brick building in which are housed the Departments of Domestic Science and Arts and of Mechanic Arts. The Department of Domestic Science and Arts occupies the upper floor and is equipped with sewing machines, charts, lockers, tables, desks, cooking utensils, range, gas stoves and ovens; and with the necessary demonstration table, dishes, silverware, linen, glassware, etc., for a dining room. The Department of Mechanic Arts occupies the basement and first floor of the building and is supplied with benches, individual and special tools, Fox trimmer, mortiser, tenoning machine, band saw, lathes, engine lathes, planer, hack saw, grinder, etc. The molding room occupies a part of the basement.

The Armory.

A two-story, red brick building. The first floor is occupied by the classes in drawing and forging, and is equipped with tables, down-draft forges, anvils, hammers, vises, etc. The second floor constitutes the gymnasium and armory proper, and is equipped with dumb bells, Indian clubs, horizontal bar, traveling rings, spring board, vaulting horse, mats and the usual apparatus for physical training; and with shower baths and lockers.

Dormitory.

Dacotah Hall, the new dormitory, is a four-story pressed brick structure with accommodations for eighty-four young ladies, and under the direct supervision of a competent preceptress. It is heated by steam and lighted by electricity. All the rooms are provided with necessary furniture, including mattresses and pillows. Young ladies intending to reside at Dacotah Hall should bring with them at least three sheets, three pillow cases, blankets, towels and soap. The rooms are well arranged and comfortable. Preference in the choice of rooms is given in the order of application. The health and comfort of the students are the first considerations, and all matters pertaining to health and sanitation are carefully observed. The payment of rent is required strictly in advance; three months at $1.50 to $2.00 per month, according to location of room. Bath rooms, lavatories, closets and hot and cold water are found on each floor. The dining room is managed on the co-operative plan and meals furnished at cost. During the year 1908-9 the cost of meals varied from $1.90 to $2.50 per week, and averaged about $2.25. Pupils who board at the dormitory are required to deposit $10 per month in advance. Proper rebate is made at the end of the month when the cost of meals is determined. Money paid for board is refunded in case of sickness or in case of absence extending over a period of one week. Young ladies who room at Dacotah Hall are furnished light and heat and the use of a laundry without extra charge, but pay for the gas consumed in their private washing. They are required to care for their own rooms and to serve in turn waiting table. Mail is received at the Hall twice a day.

Power House and Engine Laboratory.

A one-story red brick structure 60 ft. wide by 140 ft. long. One section of this building contains the boilers, pumps, dynamo and bunkers made use of in heating and lighting the plant. Another section, the engine Laboratory, is 60 ft. by 100 ft. and houses the Department of Steam Engineering. This department is equipped with a thirty-five-horse power automatic Ideal engine; a twenty-horse power horizontal side-crank Howell engine; a twenty-horse power Automatic gasoline engine; Case Traction Engine; Gear-Scott dismounted traction engine; portable gas engine; calorimeters; Crosby steam engine indicator; Amsler planimeter; friction brake; water meter; injector; pumps; traps and various boiler attachments, etc., etc.

Athletic Field.

The N-I Athletic Field is 288 ft. wide by 336 ft. long; enclosed; and in it are found the base-ball diamond, foot-ball field, out-door basket-ball field, rifle range and grand stand. Here are held the out-of-door meets and the target practice of Company A.

ADMISSION

(a) To the Normal Department.

(1) Any young man or young woman of good moral character who has completed the common school course and received a diploma will be admitted without examination.

(2) High school students and high school graduates will be admitted upon their credentials.

(3) Applicants not vouched for by the classification committee will be required to pass an examination.

(b) To the Industrial Department.

Any young man or young woman of good moral character who has completed the work of the seventh grade of the public schools and who presents satisfactory evidence of a fair working knowledge of the common branches will be admitted.

ELECTIVE COURSES

All courses of the school in both normal and industrial departments are elective. Each student, by and with the advice of parents and teachers, chooses the courses he is to pursue. This choice having been once made, no pupil will be permitted to change his course or to drop a subject except for the most important considerations and then only upon recommendation of the instructor and consent of the president. The average work is five studies recited five times a week. The unit of credit is the "point," a point being the credit given for one month's satisfactory work in a single subject, but no credit is given in academic subjects for less than a full term's work or upon the completion of the subject.

REQUIREMENTS FOR GRADUATION

(a) **From the Normal Department.**

To be entitled to graduation the student must have earned 186 points credit. The arrangement of the English-Manual Training, Latin and Supervisors Courses allows the largest possible freedom of choice in the matter of election.

(b) **From the Industrial Department.**

To be entitled to graduation the student must have earned 186 points credit, 123 of which, for young women, and 129 of which, for young men, must be in the following subjects for all courses.

	Courses	Points
English	II, III, IV	27
History	VII, VIII, IX, X	18
Mathematics	XI, XIV, XV, XVI	36
Science	XVIII, XIX, XX, XXI, XXIII XXIV, XXV,	36
Physical Training	XCV	6
Military Science (Young Men)	XCIV	6
		123-129

In addition to the above, the student must have completed four years' work (36 points) in the Arts and sufficient electives to raise the total number of points to 186. Young men may offer 6 points in Military Science as an elective. In order to afford the largest liberty of election in the Arts the student is permitted to select, subject to approval, the art courses to be pursued. The complete requirements for graduation are thus as follows:

Major W. R. Purdon, Captain D. Ferrara and Squad of Cadets

Subject	Young Men	Young Women
English—prescribed	27 Points	27 Points
History—prescribed	18 "	18 "
Mathematics "	36 "	36 "
Science—prescribed	36 "	36 "
Physical Training—prescribed	6 "	6 "
Military Science—prescribed	6 "	
Electives	21 "	27 "
Arts-elective	36 "	36 "
	186 Points	186 Points

DIPLOMA AND CERTIFICATES

Diploma.

Graduates from either department of the school will receive the diploma of the State Normal-Industrial School.

Elementary State Certificate.

By an arrangement with the Department of Public Instruction graduates from the Normal Department will be granted, upon recommendation of the president and faculty, a State Certificate of the Second Class, valid for three years, which will entitle the holder to teach in the public schools of the state.

Life State Certificate.

(a) Upon the completion of three years of successful teaching graduates of the Normal Department will be entitled to a state certificate good for life.

(b) Graduates of either the Mechanic Arts Course, Home Economics Course or Fine Arts Course, are entitled to a State Life Certificate which entitles the holder to teach that special art in the schools of the state.

RELATION TO OTHER SCHOOLS

Arrangements have been made whereby graduates from this school are admitted to the following institution with the standing indicated:

(1) STATE UNIVERSITY OF NROTH DAKOTA: The State University of North Dakota admits graduates upon their credentials, allowing full credit for all courses completed.

(2) NORTH DAKOTA AGRICULTURAL COLLEGE: The North Dakota Agricultural College admits to the Sophomore year of its Agricultural and General Science Courses all graduates of this school.

(3) ARMOUR INSTITUTE OF TECHNOLOGY: Graduates of the Mechanic Arts Course who have elected German and Trigonometry are admitted to Armour Institute without examination and receive three years' credit in shop work.

DISCIPLINE

Regularity in attendance, punctuality, industry, manly conduct, and prompt obedience to lawful authority are imperative. Fortunate the school in which the sentiment of the student body commends manly conduct. This is the type of discipline most desired at this school. In no sense is the State Normal-Industrial School a reform school and students who fail to yield a full and cheerful compliance to all requirements necessary for sucecssful work and the honor of the school will be promptly dismissed. Discipline is educative when reasonable and intelligible. This is the guiding thought with which all discipline is administered

EXPENSES

Tuition is free in all departments. Pupils in instrumental music pay for their lessons at the rate $6.00 for a term of twelve lessons. Piano rent is $1.00 per month. Good room and board may be had in private families at prices ranging from $3.00 per week upwards. Many students rent rooms and board themselves. Board and room rent, the chief items of expense, thus range from $120 to $150 per year of 36 weeks.

LIBRARY

A commodious and well lighted room in Carnegie Hall has been set apart for the use of the library and reading room. It is open to all students until 4:30 o'clock school days. Arrangements are made by which students can draw books for use at times when the library is closed.

The library contains a large collection of books labeled and catalogued; a cabinet card catalogue; bound volumes of the leading magazines; Poole's index; congressional records, government reports and much other valuable material. New additions are constantly being made. Each department of the school has a well selected line of books for reference work. The leading magazines and newspapers are at the disposal of students. A trained librarian is in charge.

SPECIAL STUDENTS

Students who are unable to carry a regular program may, upon recommendation of the classification committee, arrange for special work. All such students, however, must satisfy the committee that their preparation is sufficient to bring them properly within the entrance requirements. No student deemed deficient in the fundamentals will be permitted to elect the arts exclusively, but a fair balance will be maintained between so-called intellectual and manual training.

LITERARY, MUSICAL AND ATHLETIC

Literary Societies.

There are two literary societies, one for young women and another for young men. The Alphian is the organization of the young women, and the Sigma Pi Iota that of the young men. These societies hold their meetings each Saturday afternoon All students are required to take such part as the program committee may designate.

Boys' Glee Club.

This is a voluntary organization of young men interested in vocal music.

Girls' Glee Club.

A volunteer organization similar to the above.

The N-I Cadet Band.

A voluntary organization consisting at the present time of eighteen pieces. This is one of the most attractive features of the school life. To those who are musically inclined this offers an excellent opportunity for a substantial growth. Members of the band are excused from military drill.

Orchestra.

Composed of students and teachers under the tuition of Mr.

Vernon Alger. This organization offers an excellent opportunity for substantial groundwork. Prospective students are urged to bring their instruments when they enter school.

Young Women's Christian Association.

A voluntary organization which aims to promote Christian life among the young women of the school.

Young Men's Christian Association.

A branch of the Young Men's Christian Association flourishes under the management of the students.

Athletics.

Foot ball, base ball and basket ball teams are organized and games scheduled and played under supervision of the faculty.

Lecture Course.

The following Musical and Lecture Course will be offered the coming year.

Frank W. Gunsaulus: "Savonarola."
Schildkret's Hungarian Orchestra.
Geo. W. Thompson: "Trial of Jesus Christ."
Montaville Flowers: "Les Miserables.
Dixie Jubilee Singers.
Parland Newhall Co.
Chicago Ladies' Orchestra.

RELIGIOUS ENVIRONMENT

The church organizations of Ellendale take a deep interest in the students and many of them are identified with the various Sunday schools and Christian societies. Students are urged to become regular attendants at the church of their choice.

[SUMMER SCHOOL

Cooperating with the County Superintendent of Dickey County the State Normal-Indutrial School conducts a Summer Training School each year beginning in June. A strong faculty is retained for this session and tuition is free. Courses are offered in all Second and First Grade subjects and in Domestic Science, Domestic Arts, Agriculture and Manual Training. The Manual Training Courses include both elementary and secondary work. Instruction is offered in Cooking, Sewing, Home Economics, Bench Work, Lathe Work, Forging and Mechanical Drawing. Examinations are held at the close of the term and final grades become available for county certificates.

PUBLICATIONS

The Normal Industrial School **Bulletin** is a quarterly publication devoted to the interests of the school and is mailed prospective students upon request. The April 1908 number (Vol. 3, No. 2) was devoted to a discussion of Manual Training in Secondary Courses. It contains an address on Manual Training, an illustrated description of a Manual Training High School, recommendations, estimate of the cost of introducing Manual Training into high school courses, suggestive curricula, a brief bibliography of books on Manual Training, etc., etc. It is mailed gratis to superintendents who are interested.

TO PROSPECTIVE STUDENTS

Be present the first day of the term.

Plan to take time in acquiring an education.

Plan to make but one visit home—at Christmas.

Bring with you such text books as may be of use to you.

Write the president a few days before leaving home in order that you may be met at the station.

Enter upon the school year with the determination to make it the best year of your life.

ROSTER OF STUDENTS
1908-1909

SENIOR CLASS

Bentley, Ina	Ellendale
Barnes, Maude	Ellendale
Barnes, Basil	Ellendale
Bjornstad, Blanch	Ellendale
Colwell, Eddice	Monango
Dales, Edward	Vernon, S. D.
Dunton, Imogene	Ellendale
Dean, Helen	Fullerton
Isaac, Margaret	Lidgerwood
Martin, Iza	Ellendale
McOmish, Mabel	Ellendale
North, Ford	Plymouth, Ind.
Porter, Edward	Fullerton
Sheppard, Lois	Wessington Springs, S. D.
Weber, Bertha	Forbes
Wilson, Lulu	Monango

LIST OF STUDENTS

Anderson, Ella	Ellendale
Alcorn, Vera	La Moure
Anderson, John	Wyndmere
Alvord Maude	Ellendale
Alderin, Ruth	Deapolis
Asch, Fred	Hazelton
Abbott, Arthur	Oakes
Anderson, Louise	Fullerton
Alderin, George	Deapolis
Anderson, Christine,	Kulm
Bentley, Clell	Ellendale
Bentley, Ina	Ellendale
Bentley, Joseph	Ellendale
Barnes, Basil	Ellendale
Barnes, Maude	Ellendale
Barnes, Howard	Ellendale
Barnes, Barbara	Ellendale

Bush, Waldron	Oakes
Bjornstad, Blanche	Ellendale
Bjornstad, Emma	Ellendale
Brown, Hester	Forbes
Brown, Irene	Forbes
Barta, Evelyn	Fullerton
Beggs, Ruth	Ellendale
Beggs, Mabel	Ellendale
Boom, Francis	Ellendale
Boom, Willie	Ellendale
Boom, Josephine	Ellendale
Bunker, Ralph	Ellendale
Bunker, Mabel	Deisem
Bowler, Mamie	Ellendale
Bowler, Lucy	Ellendale
Butts, Arthur	Evansville, Ill.
Blatchford, Lilian	Berlin
Blumer, Emma	Ellendale
Blumer, Fred	Ellendale
Bergstrom, Bernard	Glover
Bowers, Mrs. W. G.	Ellendale
Baker, Mrs. Mable	Ellendale
Baumbach, Ida	Ellendale
Bowden, Mildred	Brampton
Briggle, LaDelle	Napoleon
Brown, Daisy	Ellendale
Blomquist, Agnes	Kulm
Blomquist, Gustav	Kulm
Butterworth, Hezekiah	Fredrick, S. D.
Balch, Ida	Edgeley
Balch, John	Edgeley
Barrett, William	Forbes
Crabtree, Dwight	Merricourt
Crabtree, Ben	Merricourt
Crabtree, Mattie	Merricourt
Crabtree, Lucile	Ellendale
Cochran, Hazel	Watertown, S. D.
Colwell, Eddice	Monango
Case, Byrdie	Ellendale
Cuff, Ray	Bayfield, Wis.

Case, Harley	Ellendale
Cartwright, Ralph	New Salem
Crary, Frank	Ellendale
Canfield, Caroline	Fullerton
Canfield, Edwin	Fullerton
Christ, William	Hope
Cowley, Daniel	Guelph
Dales. Frank	Vernon, S. D.
Dales, Edward	Vernon, S. D.
Dill, Glenn	Oakes
Dawe, Nellie	Fullerton
Dawe, Jessie	Fullerton
Dean, Helen	Fullerton
Dean, Robert	Fullerton
Dunton, Imogene	Ellendale
Dickey, May	Ellendale
Dickey, Adah	Ellendale
Dobler, Clara	Kulm
Drew, Viola	Ellendale
Dawes, Lila	Wells, Michigan
Dorland, Mrs. T. G.	Ellendale
Dawson, Theresa	Ellendale
Doolittle, Harry	Edgeley
Dean, Daisy	Ellendale
Daulton, Mae	Frederick, S. D.
Earnest, Lena	Fullerton
Earnest, Wilma	Fullerton
Earnest, Robert	Fullerton
Edwardsen, Clara	Oakes
Everson, Ben	Washburn
Everson, Minnie	Washburn
Eiden, Mamie	Ellendale
Eiden, William	Ellendale
Enger, Olga	Fullerton
Forsyth, Elwin	Rutland
Farrand, Emma	Ellendale
Full, Gay	Ellendale
Flemington, Adah	Ellendale
Flemington, Clara	Ellendale

Foster, Welthy	New Rockford
France, Oscar	Gackle
Full, Pansy	Ellendale
Fuller, Ethel	Ellendale
Goddard, Hebert	Ellendale
Geer, Mabel	Ellendale
Gebhardt, John	Monango
Gannon, Cecile	Ellendale
Good, Nettie	La Moure
Green, Iva	Ellendale
Gallagher, James	Ellendale
Gallagher, Grace	Ellendale
Gordon, Benjamin	Berlin
Hukari, Frank	Frederick, S. D.
Hornbeck, Mamie	Frederick, S. D.
Higgins, Georgia	Ellendale
Holte, Howard	Ellendale
Haas, Ruth	Ellendale
Harris, Arthur	Ellendale
Howell, Georgia	Elliott
Hoops, Rosa	Silver Leaf
Hohlwegler, Mary	Ellendale
Hinselman, Helen	Ellendale
Higgs, Mamie	Ellendale
Herbert, Caston	Ellendale
Henry, Clement	Cresco, Iowa
Hafey, Herbert	Ellendale
Hoybach, Lillie	Oakes
Hoybach, Arthur	Oakes
Hoybach, Edgar	Oakes
Hinck, Marie	Great Bend
Hadley, Edward	Ellendale
Harm, Lillian	Ellendale
Hogue, Dwight	Silver Leaf
Holte, Maud	Ellendale
Holte, Mae	Ellendale
Isaac, Margaret	Ellendale
Joyner, Hazel	Ellendale
Jones, Ina	Ellendale
Jones, Mabel	Wyndmere

Jackson, Walter	Bowdle, S. D.
Jackson, Fay	Bowdle, S. D.
Johnson, Simon	Sims
Johnson, Hilda	Smoland, Sweden
Johnson, Arthur	Benson
Johnson, John	Benson
Johnson, Ida C.	Benson
Jacobson, Harry	Forbes
Krieser, Bertha	Lidgerwood
Knox, Alexander	Monango
King, Leander	Ellendale
Kately, Viola	Ceylon, Minn.
Kosel, John	Ellendale
Knapp, Lucile	Berlin
Keeler, Earl	Frederick, S. D.
Kellogg, Anna	Ellendale
Kellogg, Ruth	Ellendale
Kieth, June	Ellendale
Kalbus, Emma	Ellendale
King, Mary	Ellendale
King, Florence	Ellendale
Larson, Mabel	Tunbridge
Larson, Julia	Tunbridge
Lucky, Mrs. Paul E.	Ellendale
Lange, Edith	Kulm
LaBerge, Armand	Oakwood
Lucas, Mrs. Zana	Escanaba, Mich.
Lingren, Conrad	Kulm
Leiby, Ruth	Ellendale
Lovitt, Belle	Wade
Lane, Charles	Ellendale
Lane, Abner	Ellendale
Lymann, Mrs. Eva	Ellendale
Letson, Howard	Ellendale
Lane, Charles	Ellendale
Lane, Abner	Ellendale
Larson, Mary	Marion
Morgan, Josie	Ellendale
Morgan, Howard	Ellendale
Morgan, Evan	Ellendale

Matuska, Maggie	Lidgerwood
McCulloch, Laura	Medburn
Mills, Mary	Medford
Mulligan, Ruth	Ellendale
Minton, Belle	Lemmon, S. D.
Merchant, Edith	Ellendale
Misfeldt, Carl	Ellendale
McGraw, Hugh	Cogswell
McOmish, Mabel	Ellendale
McDonald, Thomas	Ellendale
McDonald, Daniel	Ellendale
McCormick, Donald	Ellendale
McCormick, Clyde	Ellendale
Miller, Roy	Webb, Iowa
Morrison, Glenn	Ellendale
Morrison, Howard	Ellendale
Mallory, Floyd	Ellendale
Meyers, Effie	Ellendale
Maclinn, George	Page
Mock, Cora	Ellendale
Misfeldt, George	Ellendale
Mantz, Theophil	Kulm
Martin, Iza	Ellendale
McKeague, Ben	Fullerton
McKeague, Rae	Fullerton
Mitchell, Bertha	Lisbon
Mather, Thomas	Watertown, S. D.
North, Ford	Plymouth, Ind.
Nupen, Bernice	Ellendale
Nupen, Ruby	Ellendale
Nupen ,Ellen	Ellendale
Nulph, Tillie	Wyndmere
Nyland, Annie	Kulm
Newton, Leona	Monango
Olmstead, Osa	Ludden
Olson, Esther	Ellendale
Obermann, Scott	Forbes
Olney, Jay	Elliott
Owens, Melbourne	Ellendale
Ostron, Elna	Kulm

Odell, George	Ellendale
Ogren, Emil	Kulm
Ogren, Betty	Kulm
Porter, Edward	Fullerton
Post, Vera	Castalia, Iowa
Prindiville, Ann	Rutland
Pollock, Kittie	Ellendale
Paige, Preston	Ellendale
Pazandak, Mamie	Fullerton
Pinney, Craig	Minot
Peckons, Frances	Fullerton
Paige, Ruth	Ellendale
Porter, Leigh	Fullerton
Poirier, Mabel	Ellendale
Poirier, Etsher	Ellendale
Parke, Nellie	Fullerton
Peek, Bersha	Ellendale
Price, Fred	LaMars, Ind.
Rehberg, Margaret	Ellendale
Rehberg, Elizabeth	Ellendale
Royal, Leon	Ellendale
Royal, Ruth	Ellendale
Randall, Hazel	Ellendale
Randall, Florence	Ludden
Randall, Earnest	Ortonville, Minn.
Rose, Joseph	Ellendale
Saunders, Paul	Ellendale
Shimmin, Maud	Ellendale
Shimmin, Ellen	Ellendale
Shimmin, William	Ellendale
Shimmin, Albert	Ellendale
Sheppard, Roy	Wessington Springs, S. D.
Sheppard, Lois	Wessington, Springs, S. D.
Sheppard, Mrs. M. H	Ellendale
Schmierier, Jacob M	Ellendale
Schmierier, Jacob	Hellwig
Schmierier, Chris	Ellendale
Schnell, Walter	Edgeley
Smith, Chris	Alpena, S. D.
Smith, George	Steele

Streib, Walter	New Salem
Stahl, Charles	Ellendale
St. Ores, Rozela	Ellendale
Stafsburg, Clara	Ellendale
Stafsburg, Marie	Ellendale
Stafsburg, Mabel	Ellendale
Stafsburg, Edna	Ellendale
Soldal, Katie	Ellendale
Steele, Carrie	Berlin
Steele, George	Edgeley
Scott, Eugene	Forbes
Schmidt, Mathias	Elliott
Saunders, Olive	Ellendale
Saunders, Della	Ellendale
Smith, Walter	Ellendale
Smith, Sadie	Ellendale
Stevens, Lillian	Oakes
Tomren, Claus	Kathryn
Townsend, Lizzie	Ellendale
Tollefson, Joseph	Christine
Tureck, Max	Anamoose
Trainor, Mary	Ellendale
Tjerlund, Carl	Kulm
Templeman, Elmer	Webb, Iowa
Teischmann, Leah	Fullerton
Teischmann, Neva	Fullerton
Van Meter, Edwin	Ellendale
Van Meter, Herbert	Ellendale
Van Meter, Harriet	Ellendale
Van Benschoton, Maurice	Krem
Vandanacker, James	Ellendale
Williams, Stella	Ellendale
Williams, Melvin	Ellendale
Wallace, James	Silver Leaf
Wattles, Alice	Ellendale
Wattles, Stella	Ellendale
Wattles, Mabel	Ellendale
Wilson, Mamie	Ellendale
Walker, Frances	Ellendale
Wippich, Irene	Fullerton

Waeist, Richard	Ludden
Way, Alice	Ellendale
Waite, Francis	Guelph
Wheelihan, Pansy	Ellendale
Wagner, Fred	Ellendale
Wallis, Harry	Clear Lake, Iowa
Washburn, Myra	Edgeley
Wilson, Lulu	Monango
Wyckoff, Earl	Monango
Wyckoff, Vivian	Monango
Weber, Bertha	Forbes

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